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Original Articles.

A FEW STRANGE OVARIAN CYSTS.

BY HAL C. WYMAN, M. D., SURGEON WEST END DISPENSARY, DETROIT, MICH.

Ovarian tumors are of so frequent occurrence in the practice of some whose predelictions incline them toward abdominal surgery, that I may be excused for describing a few cases which have come under my observation, and which are not easily reconciled with the prevalent belief that many ovarian cysts have their origin in enlargement of the Graafian follicles.

ROKITANSKY has shown that the Graafian follicles may be so distended with fluid as to form small cystic cavities. In one case he proved that a small ovarian tumor was composed of several cysts (multilocular), each of which contained an ovule. This case would appear to have originated in some embryonic blending of the ovarian tissues, by which a number of Graafian follicles were co-mingled and developed without due regard to their normal relation to the ovarian stroma. Unilocular tumors are believed to be simple dropsies of Graafian follicles, according to CORNEIL & RANVIER, cases in which the follicle has undergone some process of degeneration before or after rupture for the escape of the ovum. The layer of cells which lines the inner wall of the follicle is supposed to undergo some process of increase or change, as a result of which the enormous tumors with their long or short, thick or slender pedicles are a consequence. In another case the ovarian tumor is composed of proliferating cysts, and we are asked to believe that, for some occult reason, the discus proligerus of the Graafian follicle has begun an attack upon the walls of the follicle, has penetrated these walls and begun a work of proliferation in their substance, which prevents their original function as an organ for providing a means of communication between the blood and the ovum, into a fibro-connective tissue stroma for the growth and maintenance of cysts.

So far as the walls of these tumors are concerned, this theory seems simple, but when we attempt to explain by it the origin of the long or short pedicle associated with them, we see the necessity for some other theory to account for their existence.

The doctrine of proliferation of the cells composing the walls of the follicle, will do well enough to explain the growth of every feature of the multilocular ovarian cyst except the pedicle.

I quote a few of the leading writers upon ovarian tumors to show how they agree in their views as to the origin of these tumors. In discussing the causes of ovarian cysts, one is surprised to find men of distinguished ability assigning as common causes, conditions and circumstances quite trivial and irrelative. The fact that many of the lower animals, cattle and sheep for example, are as often the subject of ovarian cysts as women, would lead one to think that mental states could have little to do with their etiology.

PEASLEE[1] says nothing positive is known of the causes of ovarian tumors. Exceptional cases occur in which ovarian cysts are developed soon after some derangement of menstruation, or after an attack of pain referable to the ovary, and probably due to congestion or inflammation of that organ. Marriage has been assumed by patients themselves as an exciting cause of cystic diseases of the ovary.

SCANZONI[2] thinks the immediate cause of the increase of fluid in the ovisacs is hyperæmia of the ovary.

KIWISCH[3] accepts oöphoritis as an exciting cause. Chlorosis, the scrofulous diathesis, menorrhagia, parturition, sterility, and marriage have been assigned as causes. Many experienced observers believe that heredity is a great factor in the development of ovarian cysts.

DR. LEE concludes, from an analysis of 36 cases, of which he was quite positive of the cause, that the effects of labor are the most frequent cause (14 cases); next the sudden suppression of the menses; next, the excitement of marriage. He also thinks that disappointed affection is one of the most fertile causes in the unmarried.

NIEMEYER says that most cysts of the ovary originate from degeneration of Graafian vesicles, which enlarge to more or less extensive cysts, by imbibing serous fluid, and by thickening of their walls. In some cases it is prob-

1 Ovarian Tumors.
2 Klinische Vorträge.
3 Klinische Wochenschrift.

able that the dropsical dilatation is caused by inflammation of a follicle, which leads to thickening of its wall and impedes its evacuation. In most cases no inflammatory origin can be made out.

In a second form of ovarian cysts there is a *cystoid new formatian*, partly in the stroma of the ovary, partly in the walls of an old mother cyst, in which the young (daughter) cysts develope.

A third form of ovarian cysts is caused by the consumption of the stroma in compact, gradually increasing spaces (alveoli). KIWISCH designates this as alveolar degeneration of the ovary.

GOOD says, hydrops ovarii is sometimes found in pregnant women, but far more commonly in the unimpregnated and barren. It is also met with in the young and those who regularly menstruate, as well as in those whose term of menstruation has just ceased.

The fluid is sometimes lodged in a cyst, occasionally in many cysts, or perhaps hydatids, and there is great difficulty in ascertaining its exact situation, and consequently in puncturing it, and especially in evacuating the water when there is more than one cyst.

TAIT says he has found little that has either harmonized with his own observations, or seemed to him to give any satisfactory explanation of the growths.

We may dismiss what we know of the causes of ovarian dropsy in the confession that we know very little about them. The most common form, the adenoid or proliferous, and also the rare multiple tumors, occur during the period of life when ovarian cell-growth is mature; the more rare unilocular cystic growths arising in the neighborhood of the ovary, besides being met with during this period, occur at the extremes of life.

He has not yet met with a unilocular tumor which was ovarian, and he holds that all unilocular tumors in the neighborhood of the ovary are not ovarian, but of parovarian origin.

It is a point for investigation whether or not the curious little pedunculated cyst, representing the terminal bulb of the Wolffian tube, and generally known as the organ of Rosenmüller, may not sometimes form a unilocular tumor of morbid size, and be removed as an ovarian tumor.

He (TAIT) does not mean to say that such a thing as a unilocular tumor of the ovary proper may not occur, but is certain that, in his experience, it has not been met with; and before such a tumor is accepted, the specimen must be rigidly examined to ascertain whether or not the ovary is involved. Some forms of ovarian tumors are probably "hypertrophy of the ovaries, with arrested development of the contents."

There cannot be a doubt that there are some ovarian growths due to dropsy of the whole or the greater number of the ovaries produced—a true follicular cystic degeneration; but it would seem that these growths are rare.

BARNES* thinks the most simple idea of an ovarian-cyst formation is derived from the observation of certain specimens of distension or enlargement of Graafian sacs in the early stage. In examining some cysts one cannot help being struck with the appearance of the cysts arranged in a row close to the free border of the ovary, just as the Graafian sacs are disposed in the normal way. These are, in fact, morbidly-dilated Graafian sacs. In different specimens we may see similar appearances, the cysts becoming larger and larger, until their distinct existence is lost by the septa between them being absorbed by pressure and atrophy. DR. RITCHIE says he has succeeded in finding ova in a large number of ovarian cysts.

Cystic disease of the ovary rarely begins except during the period of normal ovarian activity. Cysts have indeed been found in young girls, even under ten; but menstruation sometimes is premature; and some cysts springing from the broad ligaments may have been erroneously regarded as ovarian.

In some cases there appears to be one, or chiefly one, follicle affected, and when this happens this follicle may be found not at the periphery of the ovary, but deeply imbedded in the stroma. In these cases it is reasonable to surmise that the ovum was prevented by the thickness of the surrounding structures from making its way to the surface at the proper time, that the effort would result in distension of the sac, the out-pouring of an excessive quantity of blood into it, and hence, if the epithelial lining retained, as it is likely to do, its proliferous virtue, the gradual formation of a cystic tumor.

The formative force is peculiarly active in the ovary. If interrupted or hindered in its ordinary progress, it may be supposed that, still persisting, it will reveal itself in abnormal results.

RIGBY says he traced in one case an ovarian dropsy from its beginning in oöphoritis. DR. FOX says that all the forms of cysts met with in the ovary originate from the Graafian follicles, and that the multilocular forms are not the result of any special degeneration of the stroma of the ovary, but are due to secondary formations from the interior of parent cysts thus formed.

DEWEES† says that there is sometimes great distension of one of the fallopian tubes, due to the partial development of an ovum.

CORNEIL and RANVIER,‡ in speaking of

*Diseases of Women.
†On Females.
‡Pathological Histology.

unilocular cysts, say a single ovarian cyst is sometimes seen of very large size; these tumors are considered as the result of a dropsy and dilatation of a single Graafian follicle; but we have no positive proof of it. On the contrary, they appear to result from the fusion of several cysts into one. This occurs in a peculiar manner, by means of the cystic degeneration of the ovary.

Every variety of cysts may suppurate.

Proliferous Cysts.—These cysts are multilocular, and generally contain a mucous fluid. They are very large, and formed of several cysts contained in a common envelop, or united by a dense and abundant connective tissue.

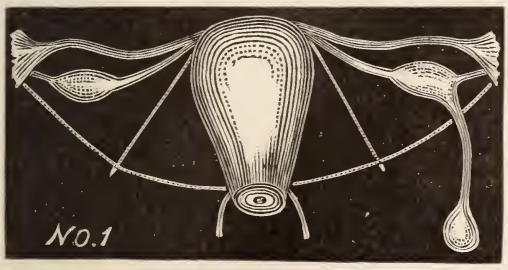

DIAGRAM NO. 1

represents an ovarian cyst which I removed from the body of a maiden lady aged 44 years. The pedicle was three inches long and the cyst was about the size of a large cherry. She was notoriously hysterical. The other ovary was sound, as shown in the diagram. She died from dilatation of the heart.

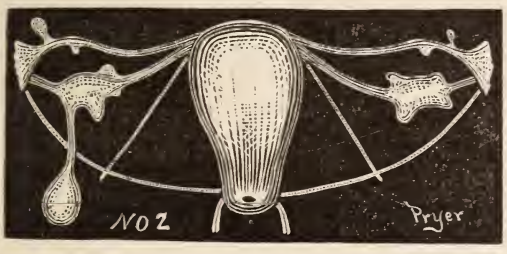

DIAGRAM NO. 2

represents ovaries and tubes removed from a girl aged 14 years, for epilepsy. Bi-manual examination of the pelvic region revealed enlargement of the ovaries. Pressure over ovaries, from childhood, provoked epileptic or hysterical seizure (Zone hysterogene or epileptique, of CHARCOT). Section of abdomen made in median line Nov. 26th, 1885. Tubes and ovaries the seat of numerous cysts, as shown in diagram. One from the left ovary had a pedicle one inch and a half in length and was as large as a small cherry. Cysts with shorter pedicles depended from the fallopian tubes. This patient has been about the house since the fourth day after the operation.

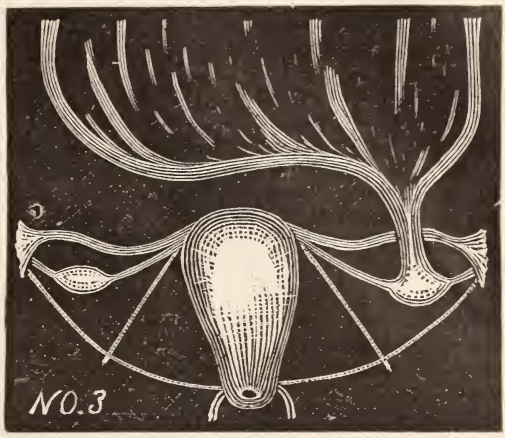

DIAGRAM NO. 3

represents an ovarian cyst removed Sept. 9th, 1885, followed by uninterrupted recovery. It was unilocular, weighing eighteen pounds with contents. Its origin was clearly from the right ovary. The pedicle was long and narrow. It resembled the cyst shown in No. 1 in every respect excepting size. Contents were albuminous fluid of yellowish brown color. It is to me hard to understand how a Graafian follicle could be gradually distended with fluid to this amount and slowly pushed away from the ovary, making the long slender pedicle of this tumor. It is easier to believe the cyst developed *de novo*, independent of any perversion of the functions of the Graafian follicle.

These cysts, with diagrams, were shown by me before the Detroit Academy of Medicine in the course of remarks on abdominal section and ovarian tumors. Since then DR. F. W. OWEN, a well-known pathological anatomist of this city, has called my attention to two cases of small cystic tumors of the broad ligament and fallopian tube. The pedicles in these cases are exceedingly long and narrow, and from their point of origin they would be pronounced simple remains of the organ of Rosenmüller. Such cysts have often been observed in the dead-house, and have passed as innocent in their nature and not inclined to increase in size and become large like the cysts which appear in the ovary. I do not see why they may not in some instances develope into the large cyst just as easily as the Graafian follicle. Their pedicles are long and slender, richly supplied with arteries and veins, just the apparatus required for building cyst walls and cyst contents. When cysts attain the enormous size sometimes found in the abdomen, the pedicle has acquired such a volume that it is a difficult matter to determine whether it originated in a Graafian follicle, a pedunculated cyst of ovary or a cyst of the fallopian tubes, like those shown in my diagrams.

BACTERIOLOGY AND DISINFECTION.*

BY J. E. CLARK, M. D., F. C. S., DETROIT, MICHIGAN.

(*Continued.*)

The various substances at present employed for the purpose of preventing or controlling the dissemination of disease possess in an eminent degree the very valuable characteristics of reason and logical sequence. While it has been an admitted fact for centuries that certain bodies possessed an influence, as prophylactics over peculiar diseases, the *modus operandi* was accounted for by superstition or a ratiocmation at present demonstrated to have been puerile or extremely sophistical.

Granted, the "parasitic life doctrine" as conclusive and proven by experience and demonstration, the absolute value of disinfection is unquestionably established.

The evidence is before our eyes; we can see the parasite, a living, moving reproductive organism, and we possess ample means for its destruction by germicides (disinfection), or the prevention of its development and increase by antiseptics. The hypothetical assumptions upon which the value of disinfection and antiseptics were based have been succeeded by conclusions based upon demonstration of fact, the element of error being absolutely eliminated.

The advance has not been so much in their use as in their intelligent and rational application.

Sulphurous anhydride is mentioned by HOMER; in book 22 of the Odyssey he says:

"Bring sulphur straight and fire (the monarch cries).
And at the word obedient flies,
With fire and sulphur, cure of noxious fumes,
He purged the walls and blood polluted rooms."

And so on down through the centuries we find evidence of the practice of disinfection and superstitions that in some way or other it was beneficial. The advance in the knowledge of an enlightened community of to-day on this subject is of course great; ample room, however, remains for further knowledge. Preventive medicine is destined ere long to hold a position second to none in the opinions of both the public and the profession.

The people are realizing that suffering and sickness are not an inevitable and necessary part of our nature. The day of superstition is fast drawing to a close; mankind no longer believes that diseases are produced by demons, evil spirits, comets, malignant stars, etc. The offices of priest and physician are no longer united. The list of known preventable diseases is daily increasing. DR. PARKES, a few years ago, in his work on hygiene, says, "that apart from malaria we hold our health and life almost at will." Since the publication of DR. PARKES' work, however, the investigations of KLEBS on the subject of malaria, whereby he discovered the bacillus malariæ, seem to have removed even this *opprobrium medicorum* from the list of non-preventable diseases. It is estimated by PROF. BENNETT that Great Britain furnishes alone 2,800,000 persons per annum sick from preventable diseases.

If the statement is true that "ignorance begets filth, filth begets disease, disease begets sin, and sin begets crime," surely an intelligent comprehension of the relation between dirt and disease, and their possible relation to crime, should spur us on to more earnest endeavors to reveal the truth and enforce a recognition of those twin sisters of health—disinfection and cleanliness.

To thoroughly disinfect is the *ne plus ultra* of hygiene and sanitary science. The methods pursued to accomplish this object and the material employed becomes then of the highest importance. The aim of the sanitarian is to either destroy the *materies morbi* (disinfection) or prevent its development (antisepsis) and to accomplish these ends successfully we have a large number of substances.

A disinfectant, then, is a germicide or a substance which when brought in contact with a germ destroys it. And here let me draw your attention to a popular fallacy that anything which masks or covers a bad smell is a disinfectant. True it may be, but it may be only a deodorizer; a terrible sham all the more to be deprecated because it gives a fancied security to its unhappily ignorant believer.

A late report of the American Health Association in referring to the injurious consequences likely to result from the misapprehension and misuse of the word disinfectant, says: "*Recent researches have demonstrated that many of the agents which have been found useful as deodorizers or as antiseptics are entirely without value for the destruction of disease germs.*" A deodorizer covers or masks the smell sometimes by substituting its own for the original, while an antiseptic prevents the development of the volatile products of decomposition by arresting the processes of putrefactive fermentation which gives rise to them, neither of them, however, being true disinfectants, that is, causing the death of the disease germs.

Germicides are antiseptics, but all antiseptics are not germicides.

To the surgeon, however, whose object is more to prevent development of disease germs than to destroy them, the study of antiseptics

* Read before the Wayne County Medical Society.

per se becomes of extraordinary interest; of course in order to become efficient it is necessary to observe that the disinfectant or antiseptic comes in contact with the disease germ. And to facilitate we have the solid liquid and gaseous disinfectants.

For the disinfection of the atmosphere of dwellings we use the gaseous substances, such as the fumes of sulphur, chlorine, bromine or iodine. For the clothes, person and excreta we use the liquids or solids reduced to a liquid form. The eminent disinfectant properties of chlorine renders this cheap and abundant principle extremely valuable, hence our admirable combinations of the various chlorides of zinc, magnesium and sodium in disinfectant and antiseptic liquids, such as LABARRAQUE'S solution, etc.

For the disinfection of the atmosphere of the sick-room, probably nothing is better than the disinfectant lamp wnich I here show you. Suggested by DR. RICHARDSON, of London, and for sale by PARKE, DAVIS & CO., as you perceive, it evolves the gaseous products of chlorine, bromine, iodine, or sulphur, and is convenient and portable. Of course but a comparatively small amount of disinfecting material is set free, but we should bear in mind that the atmosphere of a room at no time contains more than a comparatively small amount of infectious material.

Disinfectants are to be applied to the person, the sick-room, the clothing, the excreta, the ingesta, privy vaults, cess-pools, etc. Never use too small a quantity of a disinfectant; there is no middle course, you either destroy the germ or you do not; a slight excess can do no harm, an insufficiency is waste. For formulæ for different disinfectant solutions, I quote the American Public Health Association Committee:

FOR EXCRETA—SOLUTION NO. I.

Four ounces of chloride of lime to one gallon of water. Use one pint for the disinfection of each discharge in cholera, typhoid fever, etc. Allow it to stand ten minutes before emptying into vault.

SOLUTION NO. II.

Corrosive sublimate and permanganate of potash in soft water, in the proportion of two drachms of each to each gallon of water. This is odorless. Use same as No. 1, but allow longer contact with excreta.

SOLUTION NO. III.

One part Labarraque's solution to five parts of water. Can be used same as above, but is preferable for the cleansing of the body of the sick and the attendants.

SOLUTION NO. IV.

Four ounces of corrosive sublimate to a gallon of water, and add one drachm of potass. permanganate to each gallon. One fluidounce of this to a gallon of water will answer for the disinfecting of clothing, bedding, etc. Let stand for two hours.

ANÆSTHESIA BY INCARCERATION OF THE ANÆSTHETIC.

BY DR. C. E. NELSON, NEW YORK.

At the meeting of the New York County Medical Society, on December 28th, this new plan was advanced by DR. L. CORNING, of New York. It naturally suggested itself to him from his carotid compressor. Important operations have been performed by his friends, after he had applied necessary ligatures to the part. Instead of using a two- or four-per-cent. solution of liq. cocaine, he first injects in one or more points a two-and-one-half-per-cent. solution in the layers of the integument; then, into the deeper parts, a solution of very small proportion, $\frac{1}{5}$, $\frac{1}{3}$, to $\frac{1}{2}$: successful anæsthesia of prolonged duration can be counted on.

This is very ingenious, and does credit to the doctor's energy and desire for improvement in medical procedures. But if I was going to be operated upon, I would rather not be conscious of the preparations, or of the details of the operation. And if I were to perform an important operation, I would prefer that the patient be thoroughly unconscious of everything.

ESMARCH'S bandage is brought up again, although years ago, several important objections were made to it. Losing a small quantity of diseased blood does not harm the patient.

Like in other novel procedures, a varied apparatus is necessary, as is the case with antiseptics. But the main fact remains, is the patient any better off after local anæsthetization? With the large majority of patients, the after-effect of chloroform, etc., is so evanescent, that it need not enter into consideration. There is a prejudice against chloroform, in favor of ether; but many of us would prefer the former, if left to our choice. A great deal depends upon detail of administration, and the position of the patient; also, the administrator should have nothing to do but watch the effect of the anæsthetic; an assistant should help him to the fluid; he should take the pulse himself, so as to have one head direct; and lastly, he should on no account leave the patient's head to watch the operation.

I do not think that it is a good thing to always stop the circulation in a part, for, say an hour and-a-half.

Our profession is at present filled with ingenious specialists, who see just as far as the next corner; and who treat the human body as a watch-maker attends to the works of a time-

piece—simply a matter of mechanism: forgetting, if they ever knew, the simplest laws of physiology, and the inter-dependence of anatomical relations.

A different (not always a better) way is brought out of doing something; friends are urged to try the plan, they come to the society meeting on an appointed night; new instruments (showing ingenuity, if nothing more) are passed around, in a handsome case; the friends give their clinical experience, which is called a free "discussion;" the president calls time; and the reader thanks his "friends" for their views; a temporary notoriety is attained, but the medical profession is very little benefitted.

After all, a profound knowledge of anatomy and physiology is the best handmaiden a surgeon can have.

DETROIT MEDICAL AND LIBRARY ASSOCIATION, REGULAR MEETING.

Dr. Lyster exhibited a fœtus within its membranes from a patient who had become pregnant six months since. Three months ago the patient commenced flowing, and continued to do so for ten weeks. Upon being called to her a few days ago, the doctor found the uterus, on examination very low down, and the body of the uterus enlarged. He made up his mind that its contents must be brought away on account of continued flowing and increasing debility of the woman, and he therefore introduced a sea-tangle tent which excited the uterine contractions and the fœtus was expelled. The noteworthy fact of the case was the prolonged period of flowing without abortion.

Dr. Pratt exhibited a bladder with the kidneys attached that was removed three days ago, at a post mortem, from a man.

The bladder contained a calculus two inches by one-and-a-half in diameter, consisting mainly of phosphate of lime. The left kidney contained phosphatic calculi of all shapes and sizes. In fact it seemed like a bag full of stones and pus. The left ureter contained several small calculi, and apparently in transit from kidney to bladder. The right kidney was about one-third larger than normal—containing three cysts filled with pus, but no stones. Only a small part of the cervix seemed healthy.

The history was briefly as follows: Seven years ago he began having severe pain in the right side over region of kidney. Shortly after he began passing small hydatid cysts from the penis. These cysts were passed at intervals, for two years. In size they were from one-quarter to one-and-one-half inches in diameter. They were composed of a structureless membrane and filled with a colorless gelatinous fluid. At one point was a little spot to which a pedicle might have been attached. During these two years he doctored himself. His method was to take large doses of sweet spirits of nitre, retain his water for a long time and then make violent expulsive efforts. By this means he passed very many, till a large one seemed to rest at the base of the bladder and render urination painful and spasmodic. I introduced a wire snare and cut it in two. After this the fragments were passed with great relief to the patient. This was repeated, at intervals of several months, for four times. During this period he was able most of the time to attend to business.

One year ago he began passing small calculi. An examination of the urine at this time revealed pus in it. The sound also detected a stone in the bladder. An effort at crushing proving unsuccessful, the supra-pubic operation was decided upon; but the patient proved to be incapable of prolonged anæsthesia. The operation was abandoned and the patient continued to pass calculi daily, some being of large size. Several hundred were thus disposed of, one corresponding about in size to a 23 English sound.

A peculiar circumstance of the case is the pain in right side and shooting to bladder, in early part of illness, and the subsequent lesions discovered in left kidney.

Dr. Boice exhibited a scirrhus cancer which he had removed from the breast of a patient a short time before. It was remarkable for the length of time since first seen, it being three years ago that it was first noticed, yet the skin was not adherent, nor were any of the axillary glands involved. The doctor on visiting his patient three days ago was glad to find the wound thoroughly healed by first intention.

Dr. Flintermann in opening the discussion of the subject of the advisability of a city small pox hospital said that with reference to one of the largest small-pox hospitals of London, it was found that within a radius of a quarter of a mile small-pox was very prevalent; within the second quarter it was very much above the average, and within the third quarter the influence of the hospital was still exhibited. Vaccination has been so generally observed in England, and for so many years, that the greatest number of hospital patients from small-pox is now from among those of middle life, who usually exhibit marks, more or less perfect, of a former vaccination. The very general observation of the vaccination requirements in Great Britain's young life has been demonstrated by the infrequency of infant mortality, and almost complete exemption of those children under five years of age, from small-pox.

In Germany, where revaccination is a matter of stringent regulation, a much better exemption is shown than in England, and it has recently risen to the highest place on the list.

In the aggregation of small-pox patients, you

increase the typhoid conditions, you place patients in the worst possible condition for recovery. The history of small-pox hospitals in in this country is a sad one. The actual nursing and care of the sick is usually done by the varioloid patients in response to the dictates of humanity. I am informed by a former inmate that in Buffalo a few years since, the hospital was locked up at night, and the patients had to take care of each other until the morning. To bring small-pox, scarlatina, puerperal fever, diphtheria, erysipelas, etc., into a city hospital would be a professional mistake.

The true way to meet the difficulty is to treat the disease where it may be, unless in exceptional instances when limited and temporary accommodation should be provided. He knew that cases of diphtheria and scarlet fever had been taken care of in St. Mary's and Harper hospitals; they have a large accommodation and are not half full, and owe something to the state and city for exemption from taxation.

DR. LYSTER said that DR. FLINTERMANN had the argument from a political point of view, as the commonwealth should take care of its poor without being dependent upon charitable institutions. But from a professional stand-point he disagreed from views expressed by the learned author of the paper. He thought that cases of small-pox, diphtheria, typhus, etc., should be treated in accordance with the scientific information in possession of the medical profession at the present time; and if by a "city hospital" DR. FLINTERMANN intended a permanent pest-house, he should disagree with him as to the advisability of establishing one. He thought people could hardly be expected to send other cases than small-pox where that disease was received.

To show the inadvisability of a permanent pest house within the limits of the city, the doctor alluded to the report of DR. BUCHANAN, head of the Health Bureau in the United Kingdom, which showed that these hospitals contribute largely to the increase and spread of small-pox. .

DR. SHURLY said the subject was one which involved the interests of the patients and the community; so far as the latter was concerned the array of facts presented by DR. LYSTER was very important. He was quite surprised at the statements about the condition of small-pox in Great Britain; he had always supposed the disease to be almost stamped out there. If it is true that the virulence of the poison is increased by small-pox hospitals, it is a great objection to them, and he certainly believed in making the rights of the community supreme, especially the right of self-protection.

DR. LYSTER had said that cases of diphtheria and scarlet fever had been treated in Hospitals, but he considered that was no place for such cases to go. They had been accepted in the institutions out of a purely humane spirit. He thought, however, there ought to be some nook or corner in the city where such cases could be taken, and much bewailed the patriotism which could be so easily extinguished by consideration of the value of a $150 lot. While such a a miserable, unpatriotic spirit was manifested, he did not see any other fate open to these unfortunate patients than to let them die unprovided for.

DR. BONNING considered it was absolutely essential to have a suitable institution for the reception of infectious diseases, and related the case of a patient who had vainly sought admission to the hospitals when suffering from diphtheria.

DR. FRANK said that the city was in urgent need of a hospital to take care of very many city patients. Many cases he had met in his practice would have been better in a hospital. The city already paid a large sum for the maintenance of about five hundred patients in the county house. It would be a saving of money to the tax payers to have a city hospital.

DR. ERICHSEN said that he was in favor of having a large plat of land occupied by what is to be called the City Hospital, but what really is intended as a hospital for contagious maladies. There should be a frame building for each disease—scarlet fever, diphtheria, small-pox, measles and cholera. The edifice for the treatment of cholera and small-pox should be at some distance from the rest. These frame dwellings should not contain large wards, but should be divided into small rooms, so as to prevent the patients from coming in contact with each other. Every means of preventing the spread of the epidemic or endemic should be adopted. In the rear of all these buildings a crematorium should be erected for the destruction of the dead, for it has been proven beyond a doubt that they may re-generate contagious maladies. After an epidemic, all the furniture should be destroyed, the walls and ceilings whitewashed and the floors sandpapered. I need not remark that the floors should be bare. With all these precautions I think the hospital, or an aggregation of hospitals, for the treatment of contagious diseases would prove successful, and if it would not cut short the spread of contagious diseases, it would contribute at least much to limit their prevalence. The buildings, such as I propose, should, of course, be situated outside of the city-limits, where plenty of ground is yet to be had. It may be argued by the opponents of this scheme that it would necessitate an enormous expenditure, but those who will take into consideration the expense attending the recent epidemic of small-pox at Montreal will, I am quite sure, deem the City hospital cheap at any cost.

Dr. Mills said that to the question proposed by Dr. Flintermann, he should answer both yes and no. We require a hospital, but, with Dr. Lyster, he entirely agreed upon a public one. He considered that stringent regulations as to vaccination would entirely meet the small-pox difficulty. Even in Montreal, he believed that if the law had been strictly enforced, in three weeks the city would have been free from small-pox, even had the people been treated at home. For cases of pure indigence, he thought it would be the duty of the public to provide a hospital. He would vote for a city hospital, but not a pest house. Infectious diseases should be treated at home.

Dr. Lundy thought it a shame that a city of this size should have no place to harbor a poor wretch stricken with disease. He thought that a city hospital should include a pest-house isolated from the main building. If we had enough ground we might do as they have done in New York and have small buildings detached from the main building. It should not be difficult in Detroit to find a plot of ground large enough and sufficiently well located. Of course such a hospital would be a great expense, and many of us know something about the cost of maintaining patients. The city will be fortunate if it can have its patients treated and cared for at four or five dollars per week. But money could not be spent for a more laudable object.

Dr. Flinterman, in replying to the criticism of previous speakers, said: ' When I spoke of a city hospital I omitted reference to the objectionable word 'pest-house.' I said in my paper that details could be laid down by a proper commission; I do not recommend that small-pox patients should be in the same building with other cases. I think that the city can afford to spend money in erecting a suitable building, and it should be so constructed as to prevent the spread of the disease. There is a good deal of unreasonable feeling about small-pox. People in the old country are not so prejudiced against hospitals. In the city of Hanover the small-pox hospital is opposite the Royal Palace. If it was so dangerous the monarch who has much more power than our authorities, would not allow it to be there. In the city of London there has been a want of precaution in preventing the spread of the disease. Antiseptic treatment has shown that general hospitals where surgery is performed is no fit place for the reception of contagious diseases, and this makes it doubly incumbent on the city to provide for such cases.

Nov. 16, 1885.

The discussion of the evening on the subject of "Neuralgia," was opened by Dr. J. E. Emerson.

The doctor began with a brief discussion of the meaning of the term, and the peculiar characteristics which distinguish it from other varieties of pain. It is not easy, he said, to give an altogether satisfactory definition, but it may be briefly said that it is "nerve-pain," as distinguished from the pain of acute inflammation, or the tenderness of tissues in a state of chronic inflammation. Hence, we find it usually in the track of nerves. He also spoke of the care necessary in the accurate description of the functional derangements of the nerves of sensation, *e. g.*, pain and painful conditions, sensitiveness, hyperæsthesia, and hyperalgesia and their correlative terms, anæsthesia and analgesia. He also spoke of the causes producing the disorder, the primary factor in its causation being, in a large majority of cases, an underlying constitutional condition, either acquired or hereditary, in short, a neurotic diathesis or state of instability of the nervous system.

Anything which lowered, so to speak, the tone of the nervous system, might excite neuralgia in a person of a neurotic diathesis.

The true key to the understanding of neuralgia and its successful curative treatment, is to be found in the fact that it is a symptom indicative of a lowered condition of, what for lack of a better term, we may call nerve power or vital force.

The rheumatic diathesis and syphilis are common predisposing, as well as exciting causes of neuralgia.

Of exciting causes none are more common than exposure to cold; damp winds, and cold, damp dwellings.

Although arising from a general condition, its partiality for certain spinal nerves as favorite points of attack, is a peculiarly interesting feature of neuralgia. The various branches of the trigeminus and the sciatic nerve are the most frequent points of attack. What has determined the point selected, it is not always possible to determine.

The spinal nerves, especially the intercostal, are nearly always the seat of hyperalgesic points in anæmia, as long ago pointed out by Flint.

Neuralgias are usually unilateral, but visceral neuralgias are not so uniformly unilateral as other forms.

Treatment, the doctor said, may be regarded as simply palliative, or curative. The hypodermic injection of morphine he thought should not be used except in the most severe cases, when other remedies had failed, for fear of forming the morphine habit.

In curative treatment, aside from the removal of any ascertainable cause, the essential thing is to improve nutrition, and by all available means to raise the general tone of the system. For this purpose no remedies are so generally

useful as the various salts of cinchona. Of these the salicylate of cinchonidia is especially useful in neuralgia of a rheumatic or malarial origin, given in five-grain doses, three or four times a day. In rheumatic cases it acts almost as a specific.

Iron, arsenious acid and the hypophosphites he had found of great value.

Gelsemium and aconite, or their alkaloids, seem to have a selective curative action in neuralgias of the trigeminus. In neuralgia of the pelvic organs the bromides act speedily and efficiently, the doctor preferring the sodium bromide. Cocaine in certain cases had, in his experience, proved of signal benefit. The galvanic current he had found as rapidly efficient as any other curative agent.

Dr. J. G. Johnson had used cold affusions to the spine, by sponging several times a day, and found the treatment to be effectual.

Dr. Jennings had used the sulphate of gelsemium in a large number of cases even to the marked physiological effects. The effects were very gratifying. In some cases the patients were wholly free from the attacks.

Dr O. W. Owen held that neuralgia was caused by an increased vibration of the nerves, and the nerve force in the fibres, due to excess of stimulation from increase of local blood-supply.

Dr. Helen F. Warner had attained good results with iodoform for pelvic or uterine neuralgias—giving it with a suppository.

Dr. Carstens was not in the habit of resorting to opium or morphine at once, because of the habit that was so easy to form. He thought neuralgia to be but a symptom of a disease, for example, malaria, rheumatism, gout, syphilis, and the like. He also urged that all physicians make a clear diagnosis at once, and proceed to remove the cause rather than treat the disease symptomatically.

He also used arsenic, strychnine, iron, quinine, and the Faradaic current.

Dr. C. B. Gilbert thought that the nature of the disease was still obscure, and thought that all physicians were more familiar with the results of their treatment than with the true ætiology of the disease.

Depraved vitality does not mean anything, but it is undoubtedly true that neuralgia attacks those who are debilitated and run down, so to speak.

In the doctor's hands, he had had good results from the pill of iron, quinine, and strychnine, also from cod-liver oil and malt with the hypophosphites. When the attacks are severe he preferred chloral hydrate to morphine.

Dr. Tilton reported a case that he had had under observation for over a dozen years. The vital defect seemed to be in the nervous system. There is considerable mental depression previous to and following the attacks.

The neuralgia is metastatic in its onset. May first appear in trigemenus, when, like a flash, it leaves this part and attacks the pneumogastric nerves with increased vigor.

Nothing seems to thwart the attacks. Only large doses of morphine and stimulants relieve the severe symptoms. The attacks are not regular in their occurrence, but are protracted and very severe when on.

Dr. N. Wiest reported a case where the neuralgia was first supra-orbital, affecting, too, the brachial plexus. The second day it was in the whole of the left side; the third day it attacked the rectum; it then went to the uterus and right ovary with increased severity. Quinine failed to relieve it, so did bromide of potash and hydrate of chloral in large doses. But when he used the sulphate of gelsemium it disappeared as if by magic.

Dr. Inglis referred to the frequency with which neuralgias are due to reflex irritation; the point of reflex irritation being often obscure, and in many instances entirely overlooked. He cited a case illustrative of these two points. A robust woman, whose general health and nutrition were excellent, had a severe occipital neuralgia of seven months' duration. The neuralgia set in a few hours after the extraction of a tooth. Under these circumstances the natural inference would be that some injury to the inferior maxillary nerve had caused the occipital neuralgia. Treatment upon that basis proving ineffectual, a more thorough search revealed a number of extremely sensitive folds at the ostium vaginæ. The vaginal opening being brought to normal, the occipital neuralgia was at once and permanently relieved.

Dr. Flintermann had had good results from applying a small fly-blister over the seat of a neuralgia.

Adjourned.

Geo. Duffield, M. D.,
Secretary.

Correspondence.

PLACENTA PRÆVIA.

I noticed a communication in a recent number of your journal in which the correspondent was inquiring what some certain man "would have done in his case of placenta prævia." He was inquiring something about tampons. My experience has been that the only thing is to deliver immediately—to be firm, gentle and bold. It is a matter of life and death, and you can not stop hæmorrhage until you have emptied the uterus. There is one good feature in regard to cases of placenta prævia, and that is they are not numerous.

In a good many years of obstetric practice I have had a few cases, and in all where I have been called I have had the pleasure of seeing my patients survive.

On the 19th of December, 1885, I had a call to go to the country to see a woman in third labor. Her husband said he expected to find her dead on returning, as she had been "flooding terribly before he started for the doctor."

When I got there I found the parturient about gone, and the regulation midwife stood shivering by the couch.

I took in the situation at a glance and immediately gave the woman 60 gtt. of fluid ergot and proceeded to deliver the woman. On examination I found the placenta laying across the internal os—a case of placenta prævia. I knew then that I had no boy's play of a job, and proceeded as I had done in previous cases. I made an opening through the placenta and delivered the child feet first in about ten or fifteen minutes. The woman began to vomit and every time a paroxysm of straining would attack her the blood would flow from the uterus in a stream. Things looked red around there, but when the child was delivered the ergot by that time had taken effect and the uterus contracted in splendid shape. I delivered the placenta and membranes, and then turned my attention to the mother, as the child was dead. She was about exsanguinated and I injected a drachm of undiluted brandy into each deltoid and a drachm into the calf of right leg. The brandy had the desired effect; what blood there was left accommodated itself to the proper channels, and the woman's life was saved.

This mode of proceeding in these cases might not work in all kinds of patients, but all of my cases have been of robust women who had plenty of the vital fluid in their veins, and I have lost none. This last one came very near crossing the line, but I think no other procedure would have saved her. In regard to the Festive Midwife I am like DR. HAYDEN, and I think when DANTE took his trip through the various departments of pandemonium he certainly forgot to notice one niche, *i. e.*, the future abode of these ignorant ones who so flippantly trifle with human life. Will our legislatures always remain thus lifeless on this subject? I hope not.

JOS. Z. SCOTT, M. D.

SCANDIA, KAS.

DR. N. CHEEVER says, in the London Med. Times, that laudanum acts as liquid fire on the sensitive membrane of the ear, and is, hence, about the worst application in a case of earache. He rubs opium up with olive oil and thus makes a preparation which gives him satisfactory results.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

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Editorial.

CAPITAL PUNISHMENT.

While the question of how to render the lawful killing of murderers painless, has been occupying a share of the attention of physicians and other philanthropists in other States, it has little or no interest for the profession of Michigan, for the very sufficient reason that this State is run on the theory that better use can be made of the criminal than to kill him. Where other commonwealths cause his sudden death by apnœa, Michigan preserves his life, and by means of good food, approved sanitary regulations, and properly-regulated exercise, seeks to prolong his life, so that he shall go down to the grave only in the fullness of years. The latter is held to be the method most in harmony with the humanitarianism which is one of the direct flowers of Christian enlightenment.

The abolition of capital punishment in Michigan was effected some thirty years ago, and for a long time the infrequency of such crimes as usually have the death penalty attached, was pointed to in evidence of the wisdom of the more advanced method of punishing criminals. Philanthropists of other States were, for a long time, wont to point to Michigan in their argument in favor of a method of treating murderers more in harmony with our Christian civilization and enlightenment. It would certainly be uncomplimentary to the better instincts of humanity were such arguments to receive no consideration, and fortified by the good showing for a number of years made by this State, the naturally repugnant hangman bade fair to become a relic of a more barbarous age. Unfortunately, however, as our population became greater and approached in the complexity of its make-up the older communities, murder became more frequent, and this frequency has continued to increase in a ratio out of proportion to the population, as compared with that of other States, until at the present time Michigan occupies a very unenviable position in this direction. The number

and the atrocity of the murders which have been committed within her borders during the past three or four years, have been sufficiently appalling to raise a question as to the propriety of allowing the murderer to live. While, doubtless, all argument from what might be the moral view of the case, as well, perhaps, as from the economic, is in favor of keeping him in confinement and compelling him to contribute his labor to the community for the remainder of his natural life, moral and economic considerations go for little when it comes to be a question of self-preservation. Self-preservation is the first law of nature, and when life itself is imperilled in any community it is no time to philosophize. The best means of averting the danger is what must be adopted, and if it becomes necessary to kill the murderer both to remove the danger of his further crime and to deter others by the example thus made of him, society demands that he be killed.

There are, doubtless, such things as epidemics of crime, and when the psychological condition of a community is such as to encourage the spread, we do not believe, in the case of the homicidal impulse, that the deterring influence of confinement in comfortable quarters, with an abundance of food and the chances of escape and pardon, is sufficiently strong to restrain that impulse. The inhibitory influence of the will over passion requires stimulation at times, and there is certainly reason to fear that the prospect of anything less stringent in the way of punishment for murder, than the execution of the perpetrator, is insufficient to the end. The substitution of the death penalty for imprisonment for life will be strongly urged at the next meeting of our State legislature, and there is no class of citizens whose views on the question will carry so much weight as physicians. It will, therefore, behoove the profession to give the matter that thoughtful consideration which the importance of the subject demands.

THE THEORY OF BRONCHIAL ASTHMA, AND THE PATHOLOGY OF HAY FEVER.

Hay fever occurs in winter or spring; sometimes it occurs at sea, or in the heart of a great city; sometimes, when no pollen can be found in the air, it arises after a full meal, or in the middle of the night; sometimes it appears almost instantaneously under the influence of intense light, the heat of a great fire, the odors emanating from certain localities, plants, and animals; some particular place or position occupied in driving; or from emotions and vivid ideas. In an able and suggestive paper in the January number of the American Journal of the Medical Sciences, SIR ANDREW CLARK points out that in these and in all like cases there are clearly two main factors at work, a certain local or constitutional predisposition, and some immediately acting exciting cause. That some such predisposition exists is plainly proved from the fact that the exciting agents which produce the malady in one class of persons entirely fail to produce it in another; and that these exciting agents, in their relations to the persons acted upon by them, are in a remarkable manner specialized, seems also proved by the circumstances that the emanations from a stable which in one person provoke a severe attack, produce in another, liable to hay fever, no sensible effect. And of the persons subject to this disease, it must be said that they are not always affected in the same manner by the same agent; for sudden intense light which may bring on an attack at one time will quite fail at another; and so we are compelled to conclude that the organism, or some particular part of it, varies so much in its conditions that its relations to its environments are capable, without sensible structural alteration, of becoming completely changed.

When we inquire into the family and personal history of an individual subject to hay fever, we shall discover as the prominent point in it that the patient and his people are more or less "neurotic." There may be found among members of the patient's family the disease of which he is himself the subject, gout, such skin troubles as urticaria and eczema, migraine, neuralgia, epilepsy, and no inconsiderable sprinkling of pulmonary disease. But that which will be found the most widely, and will connect them all, will be a sensitive, an irritable, and an unstable nervous system.

In a series of propositions SIR ANDREW sets forth what he regards as the teaching of a study of hay fever concerning the pathology of bronchial asthma, holding that it is a neuro-vascular trophic disease, and has its roots in a special vulnerability of the respiratory mucous membrane, of the respiratory nerve centres, and of certain portions of the sympathetic.

EXPLORATIVE LAPARATOMY.

The belief that the peritoneum is peculiarly resentful to the knife is one of long standing, but there seems to be grounds for believing that this conception of the nature of that membrane is about to become one of the relics of the past. During his recent visit to this country, MR. LAWSON TAIT was asked for an opinion regarding the nature of an obscure abdominal and pelvic growth which existed in the case of a patient under the care of PROF. LUSK. The noted Birmingham surgeon replied with his characteristic readiness, "cut the patient open and find out." Acting upon the suggestion, DR. LUSK performed an explorative operation, through which he was enabled to make an exact diagnosis, and the operation which he

subsequently performed was successful to the saving of a life which was doomed soon to be terminated by the disease. A case of this nature is calculated to make a very profound impression, especially on the minds of those who have stood helplessly by and seen their patients succumb from abdominal affections, the precise nature of which external manipulation has been unable to reveal, and we shall not be surprised to find in the course of a few years that the peritoneal cavity will be very freely opened, both for diagnostic and therapeutic purposes.

Dr. Geo. R. Fowler makes this subject the topic of a very interesting paper read before the Medical Society of the County of Kings, and published in the New York Medical Journal, of the 2d instant. Dr. Fowler had returned from a visit to Dr. Lawson Tait's private hospital, and the result of the practice of that prince of laparatomists has made the American surgeon an evident convert to the advisability of a freer use of the scalpel in the treatment of abdominal affections. The cases in which he considers explorative laparatomy to be justifiable are as follows:

1. Those in which the diagnosis cannot be made without opening the abdomen and exposing the parts to direct touch, or even perhaps to the sight of the surgeon, but in which every other interference is thereby shown to be impracticable or uncalled-for.

2. Cases in which a provisional diagnosis can only be made, unaided by abdominal incision, and in which but slight additional risk is incurred by an immediate and radical curative procedure based upon the knowledge thus gained.

3. Cases in which a diagnosis has been made, but in which doubt exists as to the practicability of performing a radical operation; and cases in which this particular operation is best adapted to individual cases must be decided upon after incision and exploration.

4. Cases in which the patient's life is in imminent peril, and in which it becomes imperatively necessary to at once locate the lesion threatening life and to be prepared to act promptly upon the knowledge gained by opening the abdominal cavity.

The perfection which antiseptic methods have attained will, doubtless, be found to remove many of the causes which have heretofore made an opening into the peritoneal cavity so dangerous. With a proper application of these methods and proper drainage of the peritoneal cavity, experience will, doubtless, show that the fear of wounding the peritoneum is largely a bugbear.

Holmes says that charlatanism always hobbles on two crutches—the tattle of women and the certificates of clergymen.

AN ETHICAL QUESTION.

The Boston correspondent of the Philadelphia Medical Times reports a case involving a very delicate ethical question, and one on which there is, probably, some diversity of professional opinion.

Not long ago a burglary occurred at night, which was discovered by a policeman, who arrested one of the burglars. An accomplice attempted the latter's rescue, but was beaten over the haad with the watchman's club, which afterwards presented signs of sanguinary use. The case was reported by the policeman, who was confident that he had inflicted serious injury. The following day an order was issued that the patrolmen should call upon every physician in the city, to inquire if anyone had on that day dressed scalp wounds in a man answering to such a description, and, if so, to obtain information which might lead to his discovery. It was believed that the man must have called medical aid. A great many of the doctors who gave negative answers to the inquiry asked themselves the question whether they would be justified in exposing the criminal, supposing they had obtained knowledge of him through his seeking their professional services. There was a rather wide-spread feeling that the police authorities had adopted an unjustifiable mode of investigation for apprehending a man who, though a criminal and one whom all good citizens would wish to see brought to justice, had nevertheless, by coming as a patient, a right to protection from exposure by his professional attendant. If there is a "seal of the confessional," why not a seal of the consulting-room? At all events, the police inquiry was fruitless, which may mean that some physician took this view of the matter. Was this view the correct one?

Notes.

The sneak-thief is again abroad in the land. He gave us a call on the 5th inst., and on leaving took from its place on the hat-rack the overcoat with which we were wont to protect ourself from the winter's cold. In the pockets of the garment were a clinical thermometer, a small instrument case, and sundry papers. We would gladly pay the impecunious individual enough to relieve his immediate necessities, and would guarantee him against criminal prosecution, if he would but return the coat and contents. If this is no inducement, we should agree to let him keep the overcoat, on condition that he allow us to reason with him for a few minutes. We have sufficient confidence in our persuasive powers, to believe that we could so convince him that he should have more respect for the profession than to go about

appropriating their wearing apparel, that the immediate danger of his pillaging our neighbor's offices would not be serious. We have never felt this sort of missionary spirit move us more strongly than now. We positively yearn to reform this erring young man. Lest he should not afford us the desired opportunity, we advise our readers to trust less implicitly than we, in the integrity of human character. We are from this date a pessimist.

During the year of the meeting of the late International Medical Congress at Copenhagen, DR. J. S. BILLINGS received orders from the Secretary of War to go to Europe and make a collection of books and pictures for the library of which he has charge. While abroad he took in the Congress, to which he had been elected a delegate by the American Medical Association. It has transpired, at this late day, that the Treasury Department finds that he is not entitled to receive anything for the expenses of his trip, which he will, consequently, be obliged to pay out of his own pocket. Under the circumstances the ruling seems a very unjust one. The medical officers of the U. S. Army do not seem to understand how to handle the powers that be. We are of the opinion that officers in other branches of the public service are in the habit of having their expenses paid when off on official (and not unfrequently, on unofficial) business.

Those sterling journals, the American Practitioner (monthly) and the Louisville Medical News (weekly) have been consolidated under the name of American Practitioner and News, and the new journal will be a bi-weekly, appearing every other Saturday. It will contain 32 pages in double column, and the subscription price will be $3.00. DRS. D. W. YANDELL and H. A. COTTELL, editors, respectively, of the separate journals, will have charge of the consolidation, and all that it will be necessary for them to do, to make the new publication a success, will be for them to go right along, doing just such editorial work as they have been doing. They hope, however, to do better than they have yet done, and if they succeed the American Practitioner and News will take a decidedly leading place among its American contemporaries.

The London Figaro tells a story of an American lady who, after much importuning, succeeded in having the American minister introduce her at Court in England. The Queen received the American sovereign most cordially, and all went smoothly until the latter in replying to the welcoming remarks of Her British Majesty, said that she really felt as if she had known her for a long time, as they both had their corns pared by the same chiropodist; whereupon both the American minister and Her Majesty were much shocked. It was certainly a most ungracious thing for our countrywoman to do. She should have known that crowned heads never have corns.

A St. Louis doctor cut off the tails of two lizards, and by sewing the ends of the stumps together, made Siamese twins of the reptiles. Having thus demonstrated the feasibility of the operation, he suggests its utilization as a means of transfusing blood. A vigorous animal, or, indeed, another human being, might thus be attached to a patient demanding a supply of richer blood. The idea is somewhat novel, but, perhaps, not impracticable. The object of the operation having been effected, the isthmus uniting the two bodies could be readily severed.

The Medical and Surgical Reporter enters upon the 33d year of its existence clad in a new dress. With increasing years it shows increasing virility, and we are pleased to note that it is able to keep up with the times in the matter of clothing. The increased size of the type might indicate that its editors are getting a little presbyopic. Well, none of us are exempt from the physical decay of years, but our contemporary is a living illustration of the fact that the mind need not necessarily be involved.

A contemporary holds it as a rare compliment that a reader gives it as his opinion that there is "no other journal like it." The fact certainly argues individuality, but when our readers seek to pay us a compliment, we would request them to be a little more explicit, indicating the points of difference between us and our esteemed contemporaries, and specifying whether the difference is in our favor or against us. All compliments should be securely fortified against the carping critic.

The Medical Analectic, published by MESSRS. G. P. PUTNAM'S SONS, will hereafter be edited by DR. R. W. AMIDON. The journal is a monthly periscopic summary of the progress of medical science, and occupies an important place among medical periodicals.

A little fellow, looking rather squeamish, went into a drug store, and with a very doleful look, asked for a pennyworth of salts. While the article was being weighed he said to the druggist "please Mister, you needn't give full weight, for I've got to take them."

Book Notices.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the late Charles Hilton Fagge, M.D., F.R.C.S., Physician to and Lecturer on Pathology at Guy's Hospital; Examiner in Medicine in the University of London; Senior Physician to the Evelina Hospital for Sick Children, etc., including a section on Cutaneous Diseases by P. H. Pye-Smith, M. D., F.R.C.S., Lecturer on Medicine at Guy's Hospital. Chapters on Cardiac Diseases by Samuel Wilkes, M. D., F.R.S., Physician to Guy's Hospital and to the Royal Hospital for Children. London; and Complete Indexes by Robert Edmund Carrington, M.D., Assistant Physician to Guy's Hospital, London. Vol. I.

Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut Street.

The work on the principles and practice of medicine which, in these days of prolixity in the production of works on this subject, can lay any valid claim to professional support, must have certain recommendations. It must not be a mere compilation of the oft-published views of others, but, even though it contain nothing startlingly new, must be based on the experience of its author. In order to write such a book the author must be a man of a trained mind, of mature years, and must have had ample facilities for experiment and observation. While we do not hold it an atrocious crime to be a young man, we, nevertheless, believe that it is very important, in the case of authors, that they should tarry in Jericho until their beards have grown. These requirements for the production of a good book seem to have been fulfilled in the case of the work before us. DR. FAGGE, although not enjoying a world-wide reputation, was held by those who knew him to be a physician of very high order—thoroughly educated, a close observer, an untiring worker and possessed of singular clinical genius. He spent the most of his professional life as physician to Guy's Hospital and during the twelve years immediately preceding his death he devoted his best energies to the preparation of this posthumous work. His manuscript notes were turned over to the editors, and they have arranged them and edited them as we now have them before us. They form a very exhaustive work, combining to make two octavo volumes of 1000 pages each. It is very full in its consideration of the pathology, etiology, histology and diagnosis of the diseases discussed, and in the matter of treatment it gives the methods which the author's own experience taught him to be the best. While he is far from an advocate of expectancy, (trusting to nature's power to set herself right,) his treatment is free from the empirical exhibition of drugs which many consider to be very desirable in a practical treatise. It is a work demanding close reading, but the reader who thus peruses it will find his conceptions broadened and deepened as they never can be by your so-called "practical" books. The first volume is devoted to general morbid processes, diseases of the nervous system and respiratory organs. We bespeak for FAGGE'S Practice a high place on the list of such works, when its merits shall have become properly known.

CLIMATOLOGY AND MINERAL WATERS OF THE UNITED STATES.—By A. A. Bell, A. M., M. D, Editor of "The Sanitarian," Member of American Medical Association, American Public Health Association, etc.

DISEASES OF THE LUNGS (of a Specific not Tuberculous Nature).—Acute Bronchitis; Infectious Pneumonia; Gangrene; Syphilis, Cancer and Hydatids of the Lungs. By Prof. Germain Sée, Member of the Academy of Medicine; Member of the Faculty of Medicine; Physician to the Hotel Dieu, Paris, France. Translated by E. P. Hurd, M. D., Member of the Massachusetts Medical Society; Vice-President of the Essex North Medical Society, etc. With Appendices, by Geo. M. Sternberg, M. D., Surgeon U. S. A., and Prof. Dujardin-Beaumetz, Member of the Academy of Medicine; Physician to the Hospital Cochin, etc.

DIAGNOSIS OF DISEASES OF THE BRAIN AND OF THE SPINAL CORD.—By W. R. Gowers, M. D., F. R. C. P., Assistant Professor of Clinical Medicine in University College; Physician to University College Hospital, and to the National Hospital for the Paralysed and Epileptic

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The above three volumes are, respectively, the October, November and December numbers of WOOD'S Library of Standard Medical Authors for 1885. They round out very beautifully this excellent series for the past year. DR. BELL'S reputation as a sanitarian made his selection to write the volume contributed by him very appropriate, and he has given us a unique production and one of great value to the profession of this country. The subject of climatology is one of growing interest, and especially in connection with the treatment of pulmonary affections. The profession has, however, been at a loss for a convenient and reliable guide to assist them in the utilization of the variety of climate which this country affords, in the care of these affections. DR. BELL has well supplied this loss, and it is unfortunate that his book cannot be had separately from the set of which it forms a volume.

The title-page of PROF. GERMAIN SEE'S book, taken in connection with the reputation of the author, gives the reader an adequate conception of the nature of the work, and DR. HURD has given an excellent translation.

The reader will find DR. GOWERS' treatise one of the most valuable works extant on a difficult but interesting subject. Given a correct diagnosis of a nervous affection and the way is paved to treatment. In diseases of no other organs is a correct diagnosis more necessary to therapeusis, than in the case of those of the brain and spinal cord. In no class of affections is empiricism so fraught with the possibility of mischief.

A Reference Hand-book of the Medical Sciences, Embracing the Entire Range of Scientific and Practical Medicine and Allied Science by Various Writers. Illustrated by Chromo-lithographs and Fine Wood Engravings. Edited by Albert H. Buck, M. D., New York City. Vol. I.
New York: William Wood & Co., 56 & 58 Lafayette Place.

This is the first volume of a work for which the profession has been on the *qui vive* since the announcement by the publishers that it was under way. The volume is one of the series of eight which the completed work is to contain. It contains over 800 pp., royal octavo size, set in double column, and in solid brevier type. A work which is to comprise eight of such volumes, will be one of the most extensive devoted to medicine, and an examination of the first volume satisfies one of the important position which it must hold in contemporaneous medical literature. Its aim is to treat as exhaustively as the space permits, of the more important subjects coming under the head of medical science. While the bulk of the space is devoted to matters of more practical interest, as the diagnosis and treatment of disease, the less practical subjects of medical botany, climatology, embryology, physiological and pathological chemistry, applied anatomy, medical jurisprudence, etc., come in for a becoming share of consideration. The subjects are arranged alphabetically, although the editor does not wish it to be regarded as self-indexing, the possibility of the introduction of subjects not yet contemplated into the remaining seven volumes rendering a running index impossible. In the volume before us there is, however, little difficulty in turning to such subjects as it contains. The completed work will close with a full index. The list of contributors to the first volume embraces many names familiar both at home and abroad, while the quality of the contributions of those who are to fame unknown quite warrant their participation in the preparation of the work. If we are to form our estimate of the whole work by the first volume, we shall have no hesitation in pronouncing it one of the most important placed within the reach of the profession. The publishers have very satisfactorily done their part, and in the matter of typography, engravings, lithographs, paper and binding, they have left nothing to be desired. The profession will compliment itself by giving the work their very general support.

Essentials of Vaccination. A Compilation of Facts Relating to Vaccine Inoculation and its Influence in the Prevention of Small-pox By W. A. Hardaway, M. D., Professor of Diseases of the Skin in the Post-graduate Faculty of the Missouri Medical College, St. Louis, Mo.: Member of the Dermatological Association, etc.
St. Louis: J. H. Chambers & Co.

What is the nature of vaccine? How does its production in man prevent variola? How should vaccination be performed? What kind of virus should be employed? What are the dangers of the operation? These and other practical questions connected with vaccination, are answered in the timely little work before us, and they are answered as thoroughly as the existing state of our knowledge permits. The value of the book will, therefore, be duly appreciated by every practitioner, and there are few also who will not desire to possess themselves of its contents.

Medical Progress.

Incipient Pulmonary Consumption and Its External Treatment.—From its general prevalence and from its stubborn resistance to treatment in the last stage, it will be at once conceded that a recognition of the very beginning of pulmonary consumption is one of the highest importance, both to the diagnostician and to the therapeutist. It is not intended here to deal with a tendency, or a predisposition to the disease, nor with its more marked and almost self-evident pathological changes which develop later, but with its actual first aggressive step, as it manifests itself by characteristic signs and symptoms. Viewed from whatever standpoint it may be, pulmonary consumption is a phenomenon which evolves from a train of certain circumstances no one of which is alone able to cause it, and not a single one of which is characteristic of it; but when they are all combined they render undoubted proof of its existence. Reference will be made, in the first place, to the symptoms which are indicative of consumption, after which the physical signs and conditions diagnostic of the incipient stage of the disease will be briefly reviewed.

When a patient presents himself with cough, yellow expectoration, wasting of flesh, failing in strength, losing in appetite, having chills, fever and night sweats, and a hereditary tendency, it might be presumed that these symptoms certainly indicate the existence of pulmonary phthisis. But on reflection it will appear that all these characteristics may be produced by other morbid conditions, such as malarial poisoning, associated with a slight bronchial catarrh; or these symptoms may even become aggravated by pulmonary hemorrhage, and still there would be no certainty of phthisis, for who has not witnessed all of these symptoms which, on investigation, were found to be due to mitral disease? But if the patient comes to you with a cough of a hacking character, expectoration white, gray or yellow, and occasionally streaked with blood, and no cardiac complications, then, if the other symptoms above enumerated are present, with or without hæmoptysis, the practitioner may feel tolerably sure that the case points very strongly to a serious pulmonary lesion of some kind.

But, however forcibly the symptoms may point to the existence of pulmonary consumption, there can be no certainty in regard to it unless confirmatory physical proof is also found. Physical evidence in chest diseases is

the only umpire which is capable of deciding the question intelligently, and in its present state of development it generally leaves no room for doubt either one way or the other. The one sign in the physical exploration of the chest around which all the rest group themselves in importance, in so far as phthisis is concerned, is dullness, or at least impaired percussion resonance. In fact, the disease cannot possibly arise unless this sign is developed in its early stage, and it is an almost constant accompaniment throughout the progress of the disease. If it is found in the left apex it is extremely significant; but when found in the right it is of less importance, for here is found a higher percussion pitch than on the left side in the normal state. The supra-clavicular, and the supra- as well as the interscapular regions are of most interest in percussing the chest in the incipient stage of pulmonary consumption. The clavicle, when used as a plexímeter is a most delicate test for the elicitation of impaired percussion resonance; in fact, this sound in the anterior aspect of the apex is always brought out more satisfactorily by mediate clavicular percussion than by the finger or any other plexímeter that may be employed, and sometimes an elevation of the percussion note, is appreciable in this way when not by the other methods. It is always important to corroborate the percussion signs by those of vocal fremitus, vocal resonance, and pectoriloquy, especially in doubtful cases. While, then, dullness in an apex is highly diagnostic of the disease in its early stage, it is not absolute proof of it, and must be confirmed by other signs than those which percussion can yield. For dullness may be occasioned in an apex by a thickened pleura, or a pulmonary hyperæmia, depending on some cardiac derangement, etc.

The first deviation from the normal state which auscultation reveals to us in most cases of phthisis, is a harsh or prolonged expiratory sound, probably somewhat blowing in character, unilateral, and, of course, associated with impaired percussion resonance. You also find prolonged expiration in emphysema and bronchitis, but in such cases it generally exists in both apices, or sides of the chest, and in the former case there is no tubular quality of sound. The case of emphysema and bronchitis is generally common in both lungs, and in either case there is no dullness. If any variation of pitch exists, however, in such cases, the resonance is exaggerated. Associated occasionally with a prolonged expiration, and often some time before crepitation manifests itself, is a "clicking" sound during the middle or the latter half of inspiration. This "click," which always forebodes danger, is undoubtedly produced by the passage of air through the agglutinated bronchioles which, by rending the walls of the latter asunder, develops the peculiar sound. That this is the seat of its production, and not in the alveoli, is evidenced in the fact that during improvement of the local condition the "click" resolves itself into a fine sibilant râle, which in turn is replaced by a more normal inspiration.

I do not deem it necessary to enter into a detailed account of the grosser signs which appear during the more advanced part of the first stage of phthisis, for this evidently is not the design of this paper; but I would say then that dullness, or impaired percussion resonance with a prolonged or blowing expiration in an apex are the characteristic pre-requisites in the diagnosis of the great majority of cases of incipient pulmonary consumption. If percussion and auscultation clearly establish these points there can be no doubt as to the actual nature of the beginning of a train of events, the future pathological course of which becomes no very difficult matter to outline, providing all other things remain equal. For as the consolidation progresses or extends the harsh or prolonged expiration will be changed into a tubular or bronchial breathing, which will, sooner or later, be accompanied by crepitation, subcrepitation, mucous and cavernous râles.

Concerning the treatment, I can do no more than repeat in substance what I have said in my former papers on this subject, viz: that the external application of moist heat* in such cases, as well as those more advanced, has given such good and gratifying results that almost universal relief can be promised by it, and, of course, by appropriate internal treatment in such cases. It is far from my intention to claim more for this method of treatment than it deserves, but I shall append another case in the early stage which has been treated in accordance with the external method, and so leave its work speak for itself. This case, although in the incipiency of the disease, had indeed a very serious outlook. Her family history is that of consumption—having lost two sisters with the disease within three years. She had a poor appetite and was very much reduced in weight. Her normal weight is 120 pounds, but she only weighed 93 pounds when she came under observation. But notwithstanding all these disadvantages she made a rapid recovery, as the following history will illustrate:

Miss X., aged 26, single, first came under observation June 1st, 1885, when she complained of a cough, white, frothy and copious expectoration, especially in the morning, very rarely streaked with blood, night sweats, poor appetite, bowels irregular and menstrual periods somewhat shortened in duration. Her normal weight is 120 pounds; two months ago she weighed 98 pounds, and at present she weighs 93 pounds. Lost one sister last Christmas, and another one within two years, of the same disease. Physical signs: dullness in right apex extending to first intercostal spaces in front and to spine of scapula behind. Vocal resonance, and fremitus and pectoriloquy exaggerated over same area. Bronchial respiration anteriorly, and prolonged expiration posteriorly over the same apex. No crepitation, but a click toward the end of inspiration behind. Left lung normal.

Treatment—Flaxseed poultice over left apex and stimulant expectorant consisting of muriate of ammonia, syr. senegæ, syr. pruni virginiani and tinct. of hyoscyamus.

June 12th, 1885. Cough and expectoration somewhat diminished, and appetite a little better. The physical signs were nearly the same as at the first examination, with the exception that the click towards the end of inspiration was replaced by a short sibilant râle.

June 26th. Cough and expectoration improved in quantity, appetite good, no night sweats nor chills.

Physical Signs—Dullness certainly less

*See its influence on other cases reported in Medical News, Feb. 8th, 1884, Aug. 22d and Oct. 10th, 1885; and Therapeutic Gazette, March, 1885.

marked in apex Bronchial respiration hardly evident in front and prolonged expiration posteriorly is better. The click and sibilant râles have disappeared at the end of inspiration.

Treatment—Discontinued the poultice and ordered her chest to be clothed with a flannel jacket, lined with oiled silk, and her lower extremities as far as the knees to be bathed in cold water morning and evening; to be rubbed well before and after bathing.

July 7th. She writes that her cough is but slight. her appetite good and her weight has increased to 95 pounds.

July 27th. She coughs but very little, and her symptoms have improved in every respect. Appetite very good; menses and bowels regular, and feels much stronger and looks better. Weight 98½ pounds. Physical signs showed no indication of the previous existence of the disease, with the exception of a slight increase of the vocal resonance in the right apex. Treatment same as before, except the addition of quinine.—DR. THOS. J. MAYS, in the *Polyclinic.*

ON THE TREATMENT OF FURUNCLES.—GINGEOT has contributed to the Bulletin Général de Thérapeutique (t cviii), a valuable series of articles on the treatment of boils and carbuncles, of which the following is a summary. BRODIE in his Lectures on Pathology, published in 1846, advanced the view that the furuncle was a species of eruption analogous to small-pox, and a local expression of a poison circulating in the blood. ALPHONSE GUERIN in the article Anthrax in "JACCOUD'S Dictionary" (1865), teaches that furunculosis is a septicæmia, and assigns to it an intermediate position between the general affections which localize themselves, and those which, becoming generalized, result from a lesion primarily local.

The contagiousness of furunculosis was established by STARTIN in 1866. He proved: (1) the auto-inoculation of the contagium by scratching; (2) the transmission from individual to individual by contact (as by occupation of the same bed); (3) the development of boils on the hands of surgeons and dressers consecutively to their being wounded with a bistoury which had been used in opening a furuncle. LANNELONGUE innoculates patients with matter from boils, producing at the point of puncture, furuculous eruptions.

It is not only proved that boils and carbuncles can be transmitted from man to man by contagion, but the active principle of the contagion, according to GINGEOT, has been discovered. For this discovery we are indebted to PASTEUR, who, on applying to the furunculous affection the same means of study as had been applied by him to the investigation of the pathogeny of splenic fever, fowl cholera, and other virulent diseases, "has been able to demonstrate that every furuncle contains certain microscopic parasites, and that it is to these that there are due the local inflammation and the pus formation." This microbe is called by PASTEUR the *torula pyogenica;* this mycologist, moreover, identifies this bacterium with that of abscesses of the soft parts, of osteomyelitis, and of puerperal fever; certain it is, however, that the product of cultures of furunculous origin has never given rise, by inoculation in animals, to anything but simple abscesses, never to furuncles. GINGEOT explains this fact by referring to the peculiarity of the tissue, namely the glandular apparatus of the skin, (and especially the pilo-sebaceous glands) where the furuncle has its seat; the inoculation of the microbe would have a different result according as such inoculation were made into a follicle, or into the subcutaneous cellular tissue. M. LOEWENBERG has repeated PASTEUR'S cultures and inoculation experiments, and has confirmed them; he has also shown the part played by hairs in the collection of germs. The view which he adopts and which GINGEOT endorses, makes furunculosis a parasitic disease resembling scabies, and the old humoral notions respecting the etiology of boils and carbuncles are repudiated. It is, however, certain that furunculosis is attached by many bonds of union to the other virulent affections. A certain predisposition of constitution is necessary; the *torula* does not thrive unless it finds a favorable medium. This predisposition is found in certain debilitated states of the economy from overwork, alcoholism, diabetes, lithæmia, etc., in which there is such modification of the secretions of the skin as renders the piliferous and sebaceous glands a suitable habitat for the *torula pyogenica.*

The indications of treatment are: (1) if possible, to cause the furuncles to abort; (2) this indication being impossible of fulfilment, to moderate the amount of suppuration; (3) to antagonize the constitutional condition which favors furunculous productions.

There are two principles laid down as the fruit of large experience: first, never to open early; second, seldom or never to open, even if suppuration has taken place, but to leave the boil or carbuncle to nature. Since the furuncle is a parasitic affection, the essence of the treatment ought to consist in destruction of the parasite. One of the first precepts is to apply no poultices. Even when put on cold, the poultice has no power to stay the development of the furuncle, and when warm, it can only favor such development, as heat and moisture promote the vital activity of the lower organisms; moreover, the organic substances of which the poultice is made furnish a contingent of food to the parasite. Even when the boil has gone on to suppuration, the poultice is rather injurious than otherwise, aiding the penetration of new follicles by the microbe, by spreading the pus over the skin and keeping it in contact with the glandular orifices dilated by the heat.

One of the external remedies likely to be most successful in the abortive treatment of furuncle, and which GINGEOT highly recommends, is the tincture of camphor. Both the alcohol and camphor in this preparation are excellent parasiticides. The camphorated spirit is applied to the part by means of a compress and allowed to remain in contact with the skin a few minutes. Thus treated, boils, if taken at the commencement, are frequently made to abort. The application should be made three or four times a day.

Another good agent for fulfilling the same indications is tincture of iodine, which should be painted freely several times a day over the furuncle and a little beyond. If applied till epidermic desquamation takes place, the iodine tincture does no harm, and if it does not always

prevent, it certainly moderates suppuration, thus fulfilling the second indication and better than (perhaps) any other remedy. GINGEOT believes that the iodine does good by its superlative parasiticide action; "the parasites cannot escape contact with the liquid which is introduced by capillarity into the glands, and by endosmosis into the acuminated vesicle of the top of the furuncle."

The same treatment is applicable in the early stage of carbuncle, and will often arrest its development; if, however, the progress of the carbuncle cannot be stayed, a strong solution of carbolic acid (equal parts of the strong acid and glycerin) must be brought in contact with the diseased tissue, as DR. EADE, of London, recommends.

The central core or stem must be destroyed; this may be done by freely applying the carbolic acid through any openings which may exist in the centre of the swelling, or a sufficient opening may be made with acid nitrate of mercury.

When the furuncle is opened and discharging, the usefulness of tincture of iodine is ended. Then there is nothing better than boric acid applied in the form of fine powder, which is freely dusted over the boils, or of the saturated aqueous or alcoholic solution which is kept constantly in contact with the diseased parts by means of compresses soaked in the liquid.

As for internal medication, GINGEOT has nothing better to suggest than the recommendation to follow out the line of treatment several years ago indicated by DR. SIDNEY RINGER, and endorsed by DR. DUNCAN BULKLEY. This consists "in the administration from the first of sulphide of calcium in small doses (one-sixth or one-fourth grain) every two hours." It is worthy of note that in the excellent paper which DR. BULKLEY read at this meeting, he coincides very nearly with the line of treatment above briefly summarized.—*Boston Med. and Surg. Journal.*

WHAT AND HOW TO FEED THE RECTUM.—In an article appearing in the Practitioner, Dec., 1885, W. JULIUS NICKLE, M. D., M. R. C. P., London, discusses very practically this important question. We quote some of his comments below:

If, then, one has decided to feed by the rectum, the next questions are: What is the best form of nutriment to employ, and what are the best special modes of manipulation in introducing the food into the bowels?

As to the former, the question of the best form of nutriment to use for injection, the older plan, and the one still most in vogue, is merely to inject fluid food and stimulants, not specially prepared, but in the form in which they are taken by mouth. Beef-tea, milk and brandy have been largely used for this purpose, and I have heard of arrowroot being so used in considerable quantities. Some amount of stimulation can be attained by the use of some of the substances just named, and from them can be absorbed constituents which enable the nutritive powers to better utilize the stores of nutriment already within the system. But for true food-purposes their value is apparently slight. As DR. SANSOM stated (Lancet, February 19th, 1881), only a fractional proportion of the albuminous contents of nutritive enemata, as commonly employed, is taken up into the blood current to subserve any useful purpose of nutrition. This fact has led to many attempts to improve upon the ordinary nutritive enemata.

On the whole, I conclude that the rectum and colon digest but little, and that, even when inverse peristalsis is set up, the action of the bowel upon enemata is chiefly absorptive. If so, the food should either be introduced mixed with digestive substances, or else before administration should, in some way or in some measure, be digested and ready for absorption into the venule and lymphatics of the intestinal walls. Several methods have been devised to attain these objects.

Thus DR. LEUBE* gives three parts of meat with one part of pancreas, but finely minced and mixed with water. An addition of fat does not harm the digestion of the meat and pancreas when injected, but more than one-sixth of fat is apt to cause stool. BROWN-SEQUARD'S† plan is to first clear out the bowel by an enema of luke-warm water, and then by a wooden syringe inject into the bowel two-thirds of a pound of raw beef and a quarter of a pound of hog's pancreas. Repeat twice a day. The pancreas must be fresh, the animal recently slaughtered, the fat and cellular tissue taken away. The meat and pancreas must be finely divided, and thoroughly mixed. M. CATILLON'S formula I have already given above, when speaking of his experiments; it represents a peptone of meat. M. HENNINGER‡ gives a complicated formula for a peptone of meat by digestion of meat under HCl. and pepsine. SLINGER§ has manufactured a nutrient suppository, consisting of nearly pure peptones, made by digesting lean meat with the mucous membrane of the pig's stomach. Numerous new preparations are brought before the profession each year.

Defibrinated blood and solutions of desiccated blood have been used for enemata, and especially in America. Three years ago, when I was on that side of the water, and met some medical men in consultation in reference to a certain case in which the question of feeding by rectum arose, I found that the medical attendant at once suggested a solution of desiccated blood, which is usually employed there, I believe, in the proportion of one to eight of water for injection. Fresh defibrinated ox or sheep blood appears to be considerably used in America for nutritive enemata, as DR. SANSOM was one of the first to tell us.

In his Lumleian Lectures DR. W. H. ROBERTS‖ states that "pancreatic extract is peculiarlly adapted for administration with nutritive enemata. The enemata may be prepared in the usual way with milk-gruel and beef-tea, and a dessert spoonful of liquor pancreaticus should be added just before administration. In the warm temperature of the bowel the ferments find a favorable medium for their action on the nutritive materials with which they

* "Ueber die Ernährung," etc., (quoted Lancet, October 12, 1872, p. 539).
† Lancet, Jan. 26, 1878, p. 144.
‡ Paris Médical, 1881, No. 29; Brit. Med Journ., Sept. 24, 1881, p. 544.
§ Brit. Med. Journ., Sept. 19, 1881, p. 571.
‖ Lancet, May 29, 1880, p. 828.

are mixed, and there is no acid secretion to interfere with the completion of the digestive process."

In actual practice I have departed considerably from this plan of DR. ROBERTS', preferring to inject food in the already peptonised form, and ready to pass from the bowel by absorption. For enemata, therefore, I have used, in a slightly modified form, his method of preparing the food as if for administrrtion by mouth. A thermometer being employed throughout, and either kept in the liquid or frequently introduced to test the temperature, a pint of milk with one-fifth or one-fourth pint of water is heated in a clean dish to 140° F. At that temperature, two drachms of BENGER'S liquid pancreaticus are added, and twenty grs. of bicarbonate of sodium dissolved in a spoonful of water. The whole is put in a covered jug or dish, and kept near a fire for from an hour to an hour and a-half, and still kept constantly at a temperature of 140° F. At the end of that time it must be thoroughly boiled for two or three minutes. Each step should be carefully carried out to secure success. Thus prepared, the food keeps for half a day or more. For convenience, I have given the process as for one pint of milk, but multiples of that measure may be prepared. In feeding by rectum I prefer to keep to this peptonised milk solely.

The following, from DR. ROBERTS, chiefly useful for administration by mouth, may be given by rectum also.

For peptonized gruel: wheaten flour, oatmeal, arrowroot, sago, pearl barley, pea or lentil flour, gruel well boiled, thick and strong Oj; put in a covered jug, cool to about 100° F., add liq. pancreatici ʒ ss. Keep warm under a cosy for two hours, boil and strain.

For peptonised milk gruel: thick hot gruel, cold milk, equal parts. To each pint add liq. pancreatici ʒ ij—iij, and sodii bicarb. grs. xx. Keep warm in covered jug for two hours; boil for a few minutes and strain.

For peptonized beef tea: half pound finely minced lean beef, water a pint, sodii bicarb. grs. xx.; simmer for one honr and a half; cool to 140° F.; add liq. pancreatici, ʒ ss. Keep warm under cosy for two hours; occasionally shake. Decant liquid portion and boil for five minutes.

THE COLD BATH IN TYPHOID FEVER.—The question of the utility of the cold bath in typhoid fever is not yet settled, even in Germany, where the brilliant statistics of BRAND and LIEBERMEISTER have resulted in the introduction of hydro-therapy into most of the large hospitals. As a routine measure, the system has not found favor in the eyes of English and American physicians, among whom CAYLEY, at the London Fever Hospital, seems to have been the only one who has tested the plan on a very large scale.

In the Berliner klinische Wochenschrift, Nos. 45 and 46, 1885, SENATOR discusses the cold-water treatment, and brings forward evidence to show that equally good results may be obtained without it. Undoubtedly during the past 20 years, since the introduction of hydro-therapy, the mortality from typhoid fever has been greatly reduced in German hospitals, but statistics comparing this with previous periods are manifestly unfair. Other important conditions must be taken into consideration, such as the nursing, the attention to diet, and the general hygienic surroundings, and to the improvement in these SENATOR is inclined to attribute an important share in the reduction of the death rate. GLASER'S statistics from the Hamburg General Hospital, for 1874–77, show the same mortality, 7.2 per cent., in 937 typhoid patients treated by the ordinary methods, and 868 patients subjected to the cold bath.

As a further contribution to the solution of the question, SENATOR has instituted a comparison between the results of the treatment of typhoid cases in the eight large hospitals of Berlin, for the ten years 1875–84. Of these he excludes three, the Charité and the two city hospitals—Friedrichshain and Moabit, as the patients admitted to them are from the very poorest classes; while in the Hedwig's, Elizabeth, Lazarus, Bethanien, and Augusta hospitals the conditions are very similar, and the patients are drawn from the better classes of the poor. In the three large hospitals, the Charité, Friedrichshain, and Moabit, the average mortality of typhoid cases for the ten years was 16.4 per cent., 19.6 per cent., and 15.2 per cent., respectively. In the others, which are smaller institutions, the death-rate was considerably lower, as shown by the following figures: Hedwig's, 14.7 per cent.; Elizabeth, 12.8 per cent.; Lazarus, 14.1 per cent.; Bethanien, 13.5 per cent.; and Augusta, 12-3 per cent. In the last-named institution, SENATOR has charge of the medical wards, and he takes pains to show that the low mortality is not due to any favoring condition of age, sex, or rank of the patients. As regards treatment, he has followed an expectant or symptomatic plan, while in the other four hospitals the cold bath has been used to a greater or less degree; in none, perhaps, to the extent which BRAND directed, though in the Bethanien, the system has been quite thoroughly enforced.

A comparison of the statistics of the five hospitals shows that the percentage of recoveries "has not been essentially influenced by the different special treatments in vogue." At the Augusta Hospital, no regular antipyretic treatment when the fever reaches a certain height, but the indication is always drawn from the general condition. The fever has not, as a symptom, the significance that LIEBERMEISTER and others suppose, and the changes in the nutrition of the organs do not depend on the high temperature alone. A study of tetanus teaches us that high temperature and the febrile process are two different things. SENATOR is not opposed to the cold bath; he believes that it has its uses, but as an antipyretic he places it far below quinine or antipyrine, which have also the advantage of being antiparasitic remedies. The bath does good, not so much by reducing the fever as by its action upon the nervous system; under its use the patient's mind becomes clearer and brighter; and another beneficial effect is upon the circulation and respiration, to both of which it is a powerful stimulus. If a rule is to be adopted, it should be that the cold bath is specially indicated in those cases with fever, stupor, and mental dullness—the febris nervosa stupida of the writers Statistics show very clearly that hemorrhage from the bowels is more likely to occur in this cold method of treatment, and that relapses are not more frequent.

In the discussion that followed the reading of SENATOR'S paper at the Berlin Medical Society, GOLTDAMMER, of the Bethanien, spoke of the difficulty of forming a clear judgment concerning therapeutic measures in typhoid fever. So many factors have to be considered, of which the treatment is, perhaps, not the most important. The nursing, the relative proportion of light and severe cases, and the time of entrance into the hospital influence the mortality to a very great degree. Thus, of the 3,600 typhoid patients treated in the Bethanien during 17 years, the total mortality was only 15.8 per cent., but of the patients admitted in the third week, or later, the death-rate was 36 per cent. GOLTDAMMER referred to the statistics of the Prussian army as illustrating the value of the cold bath ih typhoid fever. Prior to 1865, the death-rate from this disease ranged from 20 to 25 per cent., but for the past nine years the mortality has been only 10.1 per cent. In the other European armies BRAND'S system is not fully carried out, and the death-rate still remains high, being 25 per cent. in the Austrian army, 28 to 26 per cent. in the Italian, and 36.5 per cent. in the French

In hospital practice, the truth would seem to be that of 100 typhoid patients 75 will do well with careful nursing; of the remaining 35, from 10 to 15 will die under any method of treatment, while the fate of the remaining will depend very much on the skill with which the physician handles the therapeutic means at his disposal, of which, in certain cases, the cold bath is one of the most valuable.—*Medical News*, Jan. 2, 1886.

STERILITY.—You will frequently have women come to you, complaining, as this woman does, of sterility, expressing a desire to have children, and imploring you to do something for her. She has been married two years, and is anxious to conceive. She is not suffering from dysmenorrhœa. There are many intricate points in connection with this question of sterility. When dysmenorrhœa is present, there is no doubt that you ought to dilate; but when it is not present, will you dilate? Sometimes yes; for you must remember that in the act of conception, while there is an ejaculatory movement on the part of the male organ, there is a suction, an aspiration on the part of the uterus, and while a *crooked* organ may be able to expel its contents without giving rise to much trouble, it will not be so easy for it to aspire the semen. But this is only one of our numerous perplexities. This woman's health is good. A common cause of sterility is gonorrhœa, the inflammation of which travels up the womb, along the Fallopian tube, and renders the covering of the ovary so thick and tense that the ovum cannot escape, or if it does get out, the fimbriated extremity of the tube is so agglutinated that it cannot grasp it. We have here a small, conical cervix, that of a woman who has never conceived, and who has never had chronic endometritis. The sound can be passed without trouble for three inches; the uterus is freely movable, there is no peritonitis. This uterus is too large for a woman who has had no children, and has not dysmenorrhœa. Next Wednesday I will dilate. I am not sure that stenosis is the cause, but will try this procedure. The immunity from conception enjoyed by prostitutes is due to the fact that usually, very early in their professional career, they contract gonorrhœa, which acts as I have explained. Another cause is that the ova may not be sufficiently healthy to be impregnated, which occurs not infrequently in women who are suffering from nervous prostration. Again, the absence of sexual pleasure is set down as a cause; some women who do not experience pleasure will conceive, but the absence of pleasure is rather damaging to conception. Some women are so fastidious that they will not admit that they experience pleasure; with a shame-faced modesty, they consider such admissions as common and vulgar. But it cannot be common when ordained by divinity, sanctioned by the most sacred usage, and hallowed by love.

Some years ago I had a very intelligent patient, who was sterile, and who was very anxious for children. She had dysmenorrhœa, and I dilated her womb; it was no use. I made various applications, all of no avail. She was under my care for two years, but she could not conceive. Finally, I heard that her husband was under the care of some quacks, and a thought occurring to me, I sent for him. He was a fine, hearty man, had perfect sexual passion, and was full of semen. I procured some of this fluid, and upon examination by three competent microscopists, not a single spermatozoon could be found. Here was a solution; the fault was with the husband, he was impotent. It transpired that when a young man he had gonorrhœa and epididymitis, and this had rendered him sterile. Such a condition may exist in the present case. As a rule, however, it is the woman who is at fault. Quacks will get a hold of such men and show them their semen without any spermatozoa, tell them they are impotent, promise a cure, and give some drugs. After a while, as came out in a trial in England, they will show them under the microscope some vinegar containing the vinegar eels, which they assure them is their semen, tell them they are well, and demand a large fee. It is repugnant, but it is wise, to examine the semen in these cases. Menorrhagia is a cause of sterility. The impregnated ovum, before it has secured a good hold in the uterus, is washed away by the next menstrual flow, if it is excessive. Another cause is tissue-change in the uterus, brought about by long-continued dysmenorrhœa, whereby a proper dicidua is not formed. The problem of sterility is a very difficult one to solve, unless we have dysmenorrhœa. It may be due to an absence of the ovaries, but in such cases we would have an infantile womb. Remember that a woman is a woman not because she has a uterus, but because she has ovaries.—DR. WM. GOODELL, in *Medical and Surgical Reporter*.

NOTES ON THE NEW ANTISEPTICS, HYDRONAPHTOL AND POTASSIO-MERCURIC IODIDE.—The following are claims made for the newly-discovered antiseptic, hydronaphthol:

It is at least 12 times as effective as carbolic acid, and is entitled, as a true antiseptic, to occupy a position in the comparative tables next to the mercuric bichloride.

It is 30 times as potent as salicylic acid, 60 times as effectual as boric acid, and has 600 times the antiseptic power of alcohol.

Hydronaphthol is soluble when placed in cold water, to the extent of one part in 2,000. It is soluble in hot water in the proportion of one to 100; but when the water becomes cooled to ordinary temperatures, a precipitate occurs, leaving a solution of one to 1,000. In this strength of one to 1,000 it permanently prevents the development of the germs of putrefaction in all putrescible fluids.

Whilst the true antiseptic or inhibitory action of hydronaphthol in such cold aqueous saturated solution is perfect, its germicidal and proper disinfectant power is effective. For the destruction of already existing germs—such as have a tenacious vitality, as those of anthrax bacilli and pathogenic micrococci—it, therefore, cannot be relied on. As to its action in this regard, as compared with carbolic acid, it should be remembered that a ten-per-centum carbolic solution is required—a strength practically improper in wound treatment. In ordinary antiseptic practice, carbolic acid is valuable only on account of its inhibitory action.

The first use of hydronaphthol as an antiseptic was by Dr. G. R. Fowler, of Brooklyn, to whom the profession is indebted for its introduction to practical surgery. My own experience with the antiseptic action of hydronaphthol in the wards of the Pennsylvania Hospital and in private surgical practice confirms his observations, as given in his recent articles in the New York Medical Journal.

Hydronaphthol is a grayish substance, in the form of crystalline lamina, having a slightly aromatic taste and odor. It is soluble freely in alcohol, ether, chloroform, glycerin, benzole and the fixed oils.

In the aqueous saturated solution of one to 1,000 it is absolutely unirritating, and has no toxic action either local or systemic, is free from unpleasant odor and has no injurious action on metallic instruments or on clothing fabrics.

Besides its use in aqueous solution, I have used it in the form of a powder diluted, preferably with the oxide of zinc, in the proportion of one to 50.

I believe that hydronaphthol may well displace carbolic acid from practical surgery.

The potassio-mercuric iodide is four or five times as powerful as a true germicide or disinfectant, as the mercuric bichloride. For such use it is effective in aqueous solutions in the proportion of only one to 12,000.

The potassio-mercuric iodide is made by simply dissolving equal quantities of the biniodide of mercury and the iodide of potassium in distilled water, The solution is evaporated, and there remain yellow, needle-like crystals of the potassio-mercuric iodide.

In the use of such dilutions of this powerful antiseptic, local irritation is entirely avoided, and the risk of producing the constitutional effects of mercury is greatly diminished.

The introduction into surgical treatment of these two remarkable and powerful substances, hydronaphthol and the potassio-mercuaic iodide, will do much to overcome some of the objections and inconveniences of antiseptic practice.—Dr. R. J. Levis, in the *College and Clinical Record.*

The Therapeutic Uses of Oxygen.—Oxygen composes one-fifth of the earth's atmosphere, one-half of the earth's crust, and eight-ninths of the water of the globe. It is an essential part of the daily food, the adult organism using about two pounds daily; over two-thirds of a quart is constantly circulating in the blood, and it is the most potent factor in the processes of tissue growth and change. It is not very strange, therefore, that oxygen should be thought to have great therapeutic possibilities, and that the imagination of the enthusiastic should at times be a little carried away by apparent evidences of its potency.

Oxygen exists in three forms: the nascent, represented by O, the ordinary form, O_2, and the condensed form, ozone O_3. It is O_2 with which the organism has ordinarily to do. Oxygen enters the system mainly by the lungs, It is absorbed by the serum, and then is quickly taken up by the hæmoglobin of the blood-corpuscles to the point of almost complete saturation, *i. e.*, within nine-tenths of the point of saturation. The oxygen here is in the form of ozone, as has been sometimes asserted, but is in its neutral form (O_2), and in loose combination with the hæmoglobin (Hoppe-Seyler and Pfluger). The oxygen exists to the extent of about 17 volumes per cent. in arterial blood. This normal proportion cannot readily be changed by any safe artificial methods. The inhalation of compressed air, or pure oxygen, and the practice of rapid respiration, may perhaps increase the volume per cent. a trifle Regnault and Reist have shown that warm-blooded animals in an atmosphere of pure oxygen do not absorb more oxygen or excrete more carbonic acid gas than in ordinary air, and P. Bert admits that even in an atmosphere of compressed air there is only a slight increase in the per cent. of oxygen in the blood.

So far as we can learn, therefore, all careful experiments show that in healthy and warm-blooded animals the inhalation of pure oxygen causes almost no increase in the amount of oxygen in the blood. This amount is dependent upon another factor, *i. e.*, the amount of hæmoglobin in the blood. If this is increased, the oxygen amount is increased also, and in the same ratio the per cent. of iron—a fact of some significance.

It is the opinion of Rossbach and Nothnagel that oxygen inhaled in any manner whatever has no other effect in kind than the ordinary air supplied in extra abundance.

"Good, pure air, free from injurious, gaseous, or solid impurities, has the same therapeutic effects as the inhalations of pure oxygen."

Oxygen has been recommended for a large number of diseases, *e. g.*, chronic phthisis, scrofula, epilepsy, diabetes, neuralgias, anæmia, asthma, pneumonia, asphyxiation, poisoning with toxic gases, intermittent fever, etc. The best results appear to have been obtained in the dyspnœa of pneumonia, asthma, in asphyxiation, gas-poisoning, and anæmia. Its value in chronic disorders of nutrition is still *sub judice*, and a practical objection to its use is the difficulty and expense of administering it in large amounts for a considerable period.

We cannot quite agree with the somewhat dogmatic views of Rossbach and Nothnagel, that the therapeutic use of oxygen is without a physiological basis. It is possible that the systematic, very slight increase in the per cent. of oxygen in the blood, caused by inhaling the

pure gas, may give an impetus to the growth of hæmoglobin, especially when that substance is below the normal amount. In other words, oxygen may stimulate hæmatosis just as iron is believed to do.—*Medical Record.*

How to Advance Medicine.—Advance in medicine must be looked for by a better insight into the causes of disease; by a study of pathology in its very widest signification, which shall include not only morbid anatomy, but all those changes in the blood and nervous system which often constitutes the *fons et origo malis.* These causes may be found to be of a specfiic nature, or to exist in the ordinary surroundings of our lives. Of whatever kind they may be, a discovery of their detrimental influence will lead to the means of their removal.

Then, again, much success may be hoped for on making a more complete study of diseases when actually running their course before us, by observing which are the favorable and which the unfavorable circumstances which determine the issue of the case; and not only the surroundings should be noted, but the meaning of the symptoms should be investigated, so as to discover which to encourage and which to oppose.

When we have arrived at some knowledge acquired by these means, the action of drugs may be considered, and the conditions which suggest their employment. As I have before said, it is by no means sufficient to know the physiological action of a medicine, but rather how it will exert an influence on various pathological phenomena. To quote again the instance of digitalis, we require to know not only its action on a healthy heart and arteries, but what power it exerts on quickly acting hearts, for whose correction we now see it daily given.

In upholding these views, I am of necesity protesting against the so-called popular theory, that diseases are so many entities, whose symptoms are to be relieved by some drug; or, as I have seen it expressed in a book on the most wide-spread heresy of the day, that since it has pleased the Almighty to visit his children with various ailments, so he has provided in the herbs of the field some remedy for their cure. This is both an untruth and an absurdity; or, as a member of Parliament declared in the House of Commons, when denouncing restriction on medical practice, that all collegiate training was useless, the medical art being a gift with which some persons were naturally endowed. It need scarcely be said that he was the patron of the most flourishing quack in the country. If medicine is a branch of science, it must be studied in the same way as other sciences, by observation and experiment. There must first be a study of anatomy and physiology; then a study of disease, as seen in the living subject, and in its results on the dead; then, again, an investigation into the action of remedies of all kinds, and their suitability to the amelioration of morbid states; efficient treatment can only follow by a complete adoption of all these methods. By making it the result of a scientific procedure, we assisting to stay the degeneracy of medicine, which is ever apt to constitute treatment the very foundation of our art, the alpha as well as omega.—Dr. Wilkes, in *Brit. Med. Journal.*

Medicines which Stimulate the Liver.—Podophyllin in small doses is a stimulant to the liver. During the increased secretion of bile, the percentage amount of special bile solids is not diminished. If the dose be too large, the secretion of bile is not increased. It is a powerful intestinal irritant.

Enonymin is a powerful hepatic stimulant. It is not nearly so powerful an irritant of the intestine as podophyllin.

Sanguinarian is a powerful hepatic stimulant. It also stimulates the intestine, but not nearly so powerful as podophyllin.

Irisin is a powerful hepatic stimulant. It also stimulates the intestine, but not so powerful as podophyllin.

Leptandrin is a hepatic stimulant of moderate power. It is a feeble intestinal stimulant.

Colocynth is a powerful hepatic, as well as intestinal stimulant. It renders the bile more watery, but increases the secretion of biliary matter.

Jalap is a powerful hepatic, as well as intestinal stimulant.

Menispermin does not stimulate the liver. It slightly irritates the intestinal glands.

Baptisin is a hepatic, and also an intestinal stimulant of considerable power.

Phytolaccin is a hepatic stimulant of considerable power. It also slightly stimulates the intestinal glands.

Hydrastin is a moderately powerful hepatic stimulant, and a feeble intestinal stimulant.

Juglandin is a moderately powerful hepatic and mild intestinal stimulant.

Chloride of ammonia is credited with cholagogue properties, but it is questionable; nevertheless, it certainly stimulates the inteetinal glands.

Calomel is a powerful purgative, but whether it stimulates the liver is still *sub judice.*

Corrosive sublimate is a potent hepatic stimulant, but acts feebly on the intestines.

Sulphate of potash is a powerful intestinal irritant, but its action on the liver is variable and unreliable.

Taraxacum is a feeble hepatic stimulant.

Dilute nitro-muriatic acid has a moderate stimulant action on the liver.

Boldo, bromide of potassium, nitrate of potash, and hard soap, have each some stimulant action on the liver.—*American Medical Digest.*

Treatment of Lacerations of the Os and Cervix Uteri without Surgical Operation.—At the meeting of the Virginia State Medical Society Dr. Bedford Brown, of Alexandria, read a paper on this subject. He said that, while admitting the advantages of Emmet's operation as a prompt means of relief, though not unattended with danger, there were yet many females who were debarred from these benefits and for whom some other method, or none at all must be used. During the past twelve years the writer had treated successfully upward of twenty cases of laceration and fissure of the os and cervix of varying degrees of severity, and some complicated with cellulitis, displacements, subinvolution, etc., by means of local applications alone. The patients suffered from severe neuralgic pains, and in most of them there was more or less impair-

ment of the general health. The writer had seen several cases of laceration in the acute stage healed by first intention after the enforcement of absolute rest and the carrying out of measures of strict cleanliness and disinfection. Warm douches containing borax, boracic acid, and carbolic acid were used gently two or three times a day. If the lacerations did not heal within two weeks they would not heal at all by first intention. In the treatment of old lesions the author had obtained the best results with graduated solutions of nitrate of silver. He applied a solution of thirty grains to the ounce freely to the interior of the cervical canal, and another of fifty grains to the ounce was painted over the whole external surface of the os and cervix until a uniform thick white coating was formed. This coating protects the exposed nerve filaments, allays inflammation, stimulates the growth of healthy granulations and prevents the absorption of septic matters from the discharges. The solution should be made to penetrate to the very bottom of the fissure in order to insure success. If hypertrophy and induration of the cervix remain after the lacerations are healed, an application to the external surfate is made of a solution of the nitrite of silver, ʒ ij to ℥ j. Several of the patients thus treated became pregnant, whereas while the disease existed they were sterile, and being examined after the birth of their children, the cervix and os were found in every case to be normal and entirely free from disease.—*Med. Record.*

Lanolin, a New Ointment-basis.—Dr. Oscar Liebreich read a paper on lanolin before the Berlin Medical Society on Oct. 8th, (see the Berliner Klin. Wochens., No. 47). This substance is a mixture of cholesterin fat (from keratin holding tissues, such as sheep's wool in particular) and water. This pure cholesterin fat stands, as Berthelot has said, between a resin and a fat, but is capable of taking up its bulk of water. It is perfectly neutral, and possesses properties which are not shared by the ordinary fats nor by vaseline. In contrast with ordinary fats, lanolin with difficulty decomposes, and, which is its chief property therapeutically, it is extremely readily absorbed by the skin. It is, in fact, the neutral fat of the skin, and of epidermic tissues generally, such as hair, hoofs of horses, feathers, etc., from all of which it has been obtained.

As a proof of this high power of being absorbed, a five per cent. carbolic acid ointment, made up with lanolin, produced a feeling of numbness, without irritation, in the hand in from one to two minutes after being rubbed in.

The presence of lanolin is easily ascertained by Lieberman's cholestol test. The fat to be tested is dissolved in acetic anhydride (not glacial acetic acid). The solution gives a rose-coloration, passing quickly to dark blue and green when concentrated sulphuric acid is added. Glycerin fats do not give it this reaction.

The advantages of lanolin over vaseline and such paraffin derivatives consist in its ready absorbability. Vaseline, as is well known, greatly hinders the absorption of therapeutical agents. It is an advantage to add five or ten per cent. of ordinary fat or of glycerin to lanolin, so that the unctuous character may be better preserved.—*Brit. Med. Journal.*

Mistletoe as a Parturifacient.—The writer has noticed of late but little mention of an agent which he believes promises much as a uterine stimulant in those slow cases of parturition, not less painful to the patient than embarrassing to the accoucheur, in which, after a considerable number of "hard" but fruitless pains, nature seems to have called a halt.

In three recent cases of this description, the writer has exhibited a fluid extract of mistletoe (*phoradendron flavescens*) prepared by Parke, Davis & Co., in doses of from twenty to forty minims, repeated at intervals of twenty minutes, with the happiest results.

In a recent case, occurring in a patient aged thirty-seven years—fifth confinement—in which hard pains, simulating those of labor, had existed at long intervals for some two days, followed by a sudden gush of liquor amnii and then a complete cessation of any pains for two hours, an exhibition of this preparation in the manner indicated above, was followed in less than an hour by effective contractions, and the birth of a nine-pound male child in less than two hours thereafter—the shortest labor ever experienced by the grateful patient.

There seems to be no contra-indication to its use at any stage of labor—other things being equal, of course—and it seems probable that we have in mistletoe a parturifacient not excelled, if equaled, by ergot or gossypium.—Dr. G. V. Hale, in Texas *Courier-Record of Medicine.*

Mountain and Sea Air.—Highly nervous persons, the victims of hypochondria, those suffering from excessive brain-work—above all, those in whom these conditions are found in conjunction—should not, as a general rule, be advised to try the seaside. A quiet inland locality, or some mountainous spot of moderate elevation, will be found to suit their cases better. The monotonous aspect of the sea and the ceaseless beat of its waves are mentally depressing, while the highly strung neurotic patient is irritated instead of braced by the stimulating effects of the sea air. Those who are just recovering from a serious illness, such as pneumonia or typhoid fever, should not be sent prematurely to the seaside, as an accession of febrile symptoms is frequently the untoward result. An inland locality is more suitable during early convalescence; but, later on, nothing conduces more to complete cure than a resort to the seaside. The marvelously restorative effects of sea air in cases of slight general debility, in persons of strumous habit, and in those with family predisposition to phthisis, are well understood, and must not be regarded as being in any degree impugned by the opinions expressed in the present article.—*British Medical Journal.*

Carbon Disulphide in Neuralgia.—Guerden (Revue de Thérapeutique, December 1st, 1885,) recommends, as far superior to the menthol pencil in neuralgia, the application, for three minutes, of:

Carbon disulphide (rectified) 9 parts.
Essence of mint 1 part.
Shake well.

In superficial neuralgias, whether facial, dental, or intercostal, and in superficial rheumatic pains, this application produces instantaneous relief, and not unfrequently a cure. In the deep neuralgias, as sciatica, it is necessary to project the solution upon the painful part by means of an atomizer. Actual freezing of the skin is unnecessary. Dental neuralgia usually succumbs to this treatment applied to the corresponding cheek—a slight application to the gum, or the insertion into the carious tooth of a pledget of cotton moistened with the solution being occasionally advisable. Very obstinate facial, dental, and pharyngeal neuralgias may be subdued by gently introducing into the external auditory meatus a pledget thus moistened, squeezed out, and covered by a layer of dry cotton.—*Med. News*, Jan. 2, 1886.

Treatment of Favus in the Adult.—The crusts should first be removed by lotions of green soap, preceded, if necessary, by poultices. The hair is then to be cut as short as possible, and an ointment of eight to fifteen grains of bichromate of potassium in one ounce of lard applied, the head being afterward covered with a cap of linen or cotton cloth. The head should be thus washed with green soap, and covered with the ointment every morning and evening. If the application caused much smarting the proportion of potassium bichromate should be reduced, or if the crusts fail to become detached it should be increased. A trial of a few days' duration will suffice to determine the relation between the individual tolerance and the degree of activity of the ointment. The hair should be cut very close, but epilation is useless.—*Journal de Médecine de Paris*, November 15, 1885.

Reduction of Temperature by Ice-bags.—Dr. F. A. Burrall, of this city, writes to the Journal of the American Medical Association: "Stephan, of St. Petersburg (see Jourdal, September 26, 1885), is of opinion that the temperature in fever may be lowered by the application of ice-bags over the superclavicular region. This effect is produced by bringing the cold in contact with the large superficial veins of the neck. I have noticed that in some cases of pneumonia a sensation of intense heat is one of the most trying sensations from which the patient suffers. In two of my cases much relief was afforded by the continuous application of the ice-bag to the occipito cervical region. One of the patients told me 'it was the only comfort he had.'"—*New York Medical Record.*

Cotton Root in the Treatment of Uterine Hæmorrhage.—Massini ("Korrespondenzbl. f. Schweiz. Aerzte;" "Ctrlbl. f. klin. Med.") thinks that this drug is to be regarded not only as an efficient substitute for ergot, but as having some advantages over that remedy. Although less prompt in action, it is more enduring; hence, while it has been used successfully to increase the pains of labor and in uterine atony in the placental stage of labor, its most appropriate field is in gynæcological practice. In two cases of metrorrhagia at the menopause the author observed brilliant results from the use of the fluid extract, two or three teaspoonfuls daily.—*New York Medical Journal.*

Calomel Injections in Syphilis.—Prof. Neisser, of Breslau, uses the following formula in the treatment of syphilis by hypodermic injection:

℞ Hydrargyri chlorid. mitis,
Sodii chloridi, ää 5.
Aquæ destillatæ, 50.
M.

To this mucilage of gum arabic, 2.5 parts, might be added. Injections of this containing doses of calomel from 0.4 to 0.6, or even 0.1 Gr., may be made once a week; generally the back is preferred. Abscesses are rare.—*Deutsche Medizinal Zeitung; Medical Times.*

Strychnine in Acute Alcoholism.—Dr. Lardier has long employed strychnine in the treatment of delirium tremens, and regards it as the best remedy we possess for this condition—as, in fact, a veritable specific. He insists upon the necessity of givlng the drug in large doses. In one case he had given granules containing each $\frac{1}{15}$ grain every two hours for several days without any appreciable result. He then increased the number of granules and also administered the drug hypodermatically, giving in all $1\frac{2}{3}$ grains in the space of 23 hours. The result was a most happy one. The patient soon fell into a refreshing sleep, never exhibiting the slightest symptom of strychnine poisoning.—*The Practitioner*, Dec. 1885.

Sphacelinic Acid in the Treatment of Rosacea.—At the Fifty-eighth Congress of German Naturalists and Physicians, Dr. Unna ("Dtsch. Med.-Ztg.") reported excellent results in the treatment of uncomplicated cases of rosacea with ointments containing from five to ten per cent. of an extract of ergot that was rich in sphacelinic acid (either that known to the trade as Gehe & Co.'s "extractum secalis cornuti cornutino-sphacelinicum" or an extract prepared by Mielck, of Hamburg).—*New York Medical Journal.*

Melancholia.—Dr. S. A. Defoe, of Washington, N. J., writes that he has found the following to give excellent results in melancholia. ℞. Valerianates of zinc, quinine, and iron, each twenty grains, to be divided into twenty pills. One pill is to be taken three times a day before meals. The drugs should be absolutely pure. Dr. Defoe says he has tried this remedy thoroughly, and finds it a specific for the worry of nervous women and for incipient melancholia.—*New York Medical Record.*

The Medical Age.

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Original Articles.

SURGICAL CLINIC, HELD AT HARPER HOSPITAL, JANUARY 16, 1886.

BY H. O. WALKER, M. D.*

[Reported by MR. A. P. BIDDLE.]

EXTERNAL PERINEAL URETHROTOMY.

Gentlemen:—This patient, WM. B., aged 58, I presented to you at our last clinic, but as he had just entered the hospital, I deemed it advisable to first ascertain by urinary analysis, whether he had any disease of the kidneys, and at the same time allow a few days of preparation before making the operation, which I propose to do to-day, namely, external perineal urethrotomy.

He gives the following history: In 1863 he had an attack of gonorrhœa, which lasted until the summer of 1864, when his horse fell upon him (being at that time in the cavalry service of the U. S. army), injuring him in the region of the chest, kidneys, bladder, and perineum. For two days he was unable to void his urine, and for several days afterwards passed blood from the urethra and bowels. He was confined to bed at this time for three months, his chest injuries being considered the most serious.

The difficulty in urination continued to grow worse, with occasional retention of urine for several hours at a time. In 1876, he informs us, internal urethrotomy was made, with considerable benefit for a time. Now, he voids urine frequently both day and night, with great difficulty, passing, at times, quite a quantity of pus.

Analysis of the urine denotes a specific gravity of 1019. Alkaline reaction. Pus cells in quantity, bladder and urethral epithelium, but no casts. Alkaline urine continued for some time, indicates cystitis, which has already become a part of this man's trouble.

We will now explore his urethra, which, you observe, just admits this urethrometer (in size 12 m.) into the meatus; at 2½ inches, it is stopped. After some efforts, I have succeeded in passing the smallest filiform attachment of MAISONNEUVE'S instrument, indicating that the largest calibre is at the meatus, 12 m., and the smallest in the membranous urethra, 1 m. I will here state that our patient has been under preparatory treatment for several days, namely, quinine in five-grain doses, three times a day. The administration of the quinine is said to prevent shock and urethral fever. This statement I believe to be true, as I have seen it verified in very many urethrotomies that I have made. Our patient is now perfectly anæsthetized, and an operation of this kind should not be made unless the patient is thoroughly under the influence of the anæsthetic, for the penis is about the last part of the body to succumb to its influence. As the filiform bougie is in situ, I will now screw on the grooved staff and introduce it well through the urethra into the bladder, and then pushing the largest sized knife of the instrument the whole length of the groove, thereby cutting the floor of the urethra so as to admit a lithotomy staff. This simplifies the operation, when it can be done, and is preferable to first passing a filiform bougie and then over it a GOULEY'S tunneled sound, for the filiform bougie fills up the groove and interferes with the cutting down upon it. The staff is in position, to be held there by the assistant, pressing it well out against the perineum. I make, as you notice, my incision directly over the median raphe, about two and a half inches in length, extending to within a-half inch of the anus, cutting down to the urethra, where I distinctly feel the groove in the staff which the point of my knife enters, when I divide it for an inch or more, completing the cut to the prostate body by this triangular probe-pointed knife which I have devised for this purpose. I will now, after withdrawing the staff, gradually stretch with the prostatic forceps the prostatic urethra so as to admit my index finger into the bladder for exploration, a proceeding that should never be neglected in these long-standing cases of stricture where cystitis exists. A temporary paralysis of the prostatic urethra undoubtedly benefits the cystitis, a fact that I have frequently observed in several cases; at least my cases have done much better since I adopted this procedure. The completion of this operation consists in introducing OTIS' urethrotome into the urethra and out at the cut in the perineum, and distending it to 36 m., the size of this man's urethra; at least we conclude so, for the circumference of

* Professor of Orthopædic Surgery, Genito-Urinary Diseases, and Clinical Surgery in the Detroit College of Medicine.

his penis measures $3\frac{1}{4}$ inches, and the size of the urethra is as 1 to $2\frac{3}{5}$, the proportion of the circumference of the penis to the urethra, a fact first noticed by Dr. Otis, of New York. The knife is now withdrawn to within about an inch of the meatus, along the upper floor of the canal, while we divide with the meatotome the remainder of the constriction on the lower floor of the urethra. You notice that I can now pass with ease a No. 36 m. steel sound. After the hemorrhage ceases, which is minimum in this case, I will wash out the urethra and bladder with a warm solution of corrosive sublimate, 1 to 1,000, and apply sublimated gauze of several thicknesses to the perineum, held in place by a bandage, and to be removed at every urination. Dr. Weir, of New York, informs me that he rarely has urethral fever in these cases when this precaution is adopted.

The quinine will be continued, together with drop-doses of tincture aconite every hour for several hours, also the application of an ice-bag over the parts, using care not to freeze them—an accident that once happened me through the carelessness of a nurse. Day after to-morrow we will again introduce the 36 m. sound and continue to do so at intervals of every other day until he is well, for we expect that we will cure this man of his stricture if all cicatricial tissue is divided and the after-treatment is properly conducted.

The operation of external perineal urethrotomy is not a common one, and is only advisable in long-standing strictures of the deep urethra. It is much safer than internal urethrotomy at this point. Strictures of the pendulous portion can be cut internally with comparative safety.

The dangers to be apprehended in this operation are hemorrhage, which can, as a rule, be controlled by continued compression; urethral fever ushered in with an active rigor followed by high temperature, which usually disappears in a few hours; it may occur after urination or the passage of the sound. Septicæmia may occur, as it is impossible to adopt thorough antisepsis in these cases.

Extravasation of urine and pyæmia I have only seen when the deep urethra has been cut internally.

REMOVAL OF AN EPITHELIOMA OF THE FACE, USING A FOUR-PER-CENT. SOLUTION OF THE MURIATE OF COCAINE SUBCUTANEOUSLY.

J. F., æt. 58, first noticed, about eight years ago, a small pimple or wart near left ala of nose, it grew gradually until about four years ago, when it was burnt out with some caustic. It returned some months ago, grew rapidly, and was quite painful at times.

As it is you now observe it measures an inch in diameter, flat with indurated edges, and covered with a scab. It is what is called a squamous epithelioma. You will frequently notice that these warts on the face remain quiescent for years and then suddenly develop into a true epithelial growth, and if not removed will develop secondary complications, destruction of tissue and finally death.

We will use in this case as an anæsthetic a four-per-cent. solution of muriate of cocaine injected subcutaneously around and beneath the tumor, using about fifteen minims. I have removed the growth, twisted several spurting vessels, coapted the edges of the wound with sutures, and he states that the only pain that he felt was when I introduced the needle the last time, and that was but slight.

In minor operations such as opening abscesses, fistulæ, paracentesis thoracis, radical cure of hydrocele, injection of hemorrhoids and the cutting of strictures in the pendulous urethra, I have used the cocaine with the most satisfactory results. When used subcutaneously the operation can be commenced within three minutes after its introduction, and if its effects disappear before the operation is completed, it can be applied through the medium of absorbent cotton wrapped on the end of a probe.

In cutting strictures I introduce it into the urethra by means of a dropper, using one or more droppers full as may be necessary, having the patient hold it in by compressing the lips of the meatus with the thumb and finger, retaining it for from ten to twenty minutes, when the operation can be proceeded with.

A CASE OF SPONDYLITIS WITH APPLICATION OF PLASTER JACKET.

Edward C., aged 37, presents himself with a trouble in his spine. His history is as follows. In 1873, while hunting whale on the Pacific ocean, he was struck by one and thrown into the air, falling with great force upon the loggerhead of the boat. He became unconscious and continued so for about three weeks. The first treatment received was four days after the accident, when he reached Honolulu, where he remained in bed for about seven months, afterwards using crutches for a considerable time to aid him in getting about. Lost control of his urine immediately after the accident, which continued up to 1878, when I applied a plaster-of-Paris jacket. In 1877 had complete paralysis of the lower extremities for several weeks. When I first saw him in 1878 he had irregularity of action of the muscles of the eye, severe frontal headache at times, unsteadiness of gait, general distress and weakness, and complained of considerable pain when pressure was made over the spine extending from the fifth to the eighth dorsal vertebra inclusive. I applied at this time a plaster jacket, and repeated it two or three times. The application of the jacket gave

instant relief, and he made a good recovery with entire subsidence of all symptoms just mentioned.

To-day he comes back for treatment of the—old trouble—I was going to say, but you will see that it is a new one, for he states that after taking off the last jacket he has done all kinds of manual labor up to the time that he was a victim of a second accident, which occurred on the 28th of last July, when, while working on a building in St. Paul, Minn., he fell a distance of fifteen feet, striking on a stone pavement, breaking three ribs on one side and two on the other, together with injury to the lower dorsal vertebræ. Was confined to his bed three weeks, when he went to Chicago and had a plaster jacket applied, which he wore for thirteen weeks with some benefit. During this time he had more or less incontinence of urine, blurred vision, with considerable pain in the head and lower dorsal region. Has not worn a jacket for some time. His symptoms to-day are pain on pressure over the last four dorsal vertebræ, with a slight prominence at that point, difficult and painful locomotion, twitching of the muscles of the eye, and considerable headache.

This case is one of interest, and is a case of spondylitis, due to a traumatic cause. We will now apply a plaster jacket, extending it down to the great trochanters, just allowing room for locomotion, and there is every reason to believe that this man will get well.

CHICAGO MEDICAL SOCIETY.

OFFICIAL REPORT.

Stated Meeting, Jan. 4th, 1886.

The President, C. T. PARKES, M.D., in the chair.

The first paper read was entitled

THE EFFECTS OF COCAINE ON THE CENTRAL NERVOUS SYSTEM,

by DR. D. R. BROWER.

We have recovered from the primary effects of the brilliant discovery of DR. CARL KOLLER, that sixteen months ago electrified the medical world, and can now reason together calmly and dispassionately about this powerful therapeutic agent.

I have been using in private and hospital practice the preparation of the coca leaf for about six years, and for about one year past the alkaloid cocaine, and have reached certain conclusions as to its beneficial and its baneful effects on the central nervous system, that I propose to present for discussion in this paper. I say beneficial and baneful effects, for my first proposition is, that it is as powerful for evil as it is for good.

First. Its Effect upon the Brain.—In small doses, that is, three or four drachms of the infusion, or one-half to one grain of the alkaloid, it is the most certain and agreeable of all cerebral stimulants. It increases the frequency of the pulse and respiration, and elevates the body temperature. It gives a sense of well-being, a freedom from care, and a pleasant mental exaltation. The first effect of the drug is upon the cerebrum, then upon the medulla oblongata, the sense of mental exhilaration preceding the stimulation of respiration and circulation. In small doses it also stimulates the spinal cord, producing a desire for muscular activity, and increasing activity of reflexes.

The effect upon the spinal cord, according to the experiments of DR. ALEXANDER BENNET,* are due entirely to its effects upon the posterior column of the spinal cord; an observation that may make the drug useful in locomotor ataxia. I am now making clinical investigation in this direction.

This increased activity of the central nervous system is usually followed by a quiet, composed, self-satisfied condition of the mind and body that eventuate in sleep. These agreeable effects are accompanied with loss of appetite, frequently with nausea, constipation and diminished activity of the kidneys, of the sexual functions, and on the skin. In large doses, two to ten grains of the alkaloid, there are produced tinnitus aurium, photophobia, illusions, hallucinations, great loquacity, and a marked tendency of the mind to exaggeration and misrepresentation. If continued for some time this dose produces perversion of the affections, a disturbance of the moral emotions, a tendency to quarrel with friends and former associates, and to form alliances with persons formerly regarded as inferiors.

This state of the nervous system may become very like delirium tremens, with the same kind of muscular tremor, and the same kind of horrible hallucinations. During this time the loss of appetite and diminished activity of assimilation result in extreme pallor of the face, dryness of skin, extreme constipation, very much diminished urinary excretion, loss of sexual function, and great emaciation.

Second. Cocaine in the Alcohol and Opium Inebrieties.—Much has been written upon the use of this drug in efforts to cure this form of nerve mal-nutrition. LEWIS BAUER, M.D.,† in an admirable article details his experience with it in a case of alcohol inebriety. He began with one-fifth of a grain, which the patient soon increased to ten grains by hypodermic injection, with the same disastrous results upon the nervous system as has been mentioned; but he expresses the opinion that cocaine inebriety was less objectionable than the alcoholic.

* British Medical Journal, April 18, 1874.

† Weekly Medical Review, Vol. I, No. 12.

Dr. Erlenmeyer* gave it, in various doses, in 236 cases of opium inebriety, and expresses sentiments that entirely agree with my own. He says that while cocaine does modify and mitigate the phenomena of opium abstinence, its effect is only transient and of brief duration; he regards it of trifling value as a substitute for morphine.

Dr. J. T. Whittaker† reports, in an elaborate paper, the results from his hypodermic use in two cases of opium inebriety that were satisfactory. Dr. Palmer, of Louisville, Ky., who was one of the first to advise its use in such cases, continues to be an enthusiastic advocate of the drug.

My own experience is against its use in either of these inebrieties; it undoubtedly makes the withdrawal of either of these agents much easier for the patient, because its effects are so similar to opium and alcohol that he scarcely feels the need of either, but you place within his reach an agent much more rapidly disastrous and destructive to the nutrition of the cerebral convolutions; an agent that will soon sink him to a degradation much lower than is possible with either of the others.

Third. Cocaine in Melancholia.—The best results yet obtained from the administration of the drug have been in conditions of mental depression. Dr. Jerome K. Bauduy,‡ in a valuable paper read before the American Neurological Society, June 17, 1885, relates a very extensive experience with the drug in melancholia. His method was to inject one grain of the muriate of cocaine, and he frequently witnessed the morose, silent, taciturn patient, a prey to the most profound grief or sadness, recover his normal self, begin to talk about his case and wonder how he could ever have experienced such gloomy ideas. He reports one case of suicidal melancholia which recovered in less than one month, and to whom he only gave five injections of cocaine. Dr. Alex. B. Shaw,§ in an able paper on the uses of the drug, speaks with the same degree of positiveness of its value in the insanities with depression.

My own experience with cocaine in this form of insanity is in accord with Drs. Bauduy and Shaw, although the bad effects of the drug upon the digestive and assimilative processes, and upon the secretions, have frequently disappointed me in its use. I have observed the valuable suggestion of giving the drug several hours before eating, in order to avoid the anorexia and nausea, but even with this precaution I have frequently found it impossible, while using it, to give that great abundance of food, systematic feeding, which, after all, is the most valuable therapeutic measure in the relief of melancholia.

Then again the excretory organs are often at fault; indeed often the foundation of this form of insanity, the mal-nutrition of the brain being due to the accumulation in the blood of the waste products of tissue metamorphosis. In such cases the further depression added to those vital necessities by cocaine, must more than counteract the beneficial effects of cerebral stimulation. In such cases alteratives and stomachic tonics added to the treatment may make it successful.

I recall two cases of profound melancholia. One a physician, aged 45, from a neighboring town of this State; an uncomplicated case, the result of excessive professional work in a large country practice. He received the cocaine in one-grain doses three times a day, with pil. hydrargyri, aloes and strychnine. His recovery was rapid, and has continued for four months. The other case was that of a woman aged 48, from Indiana, laboring under melancholia, that seemed to have its origin in the fret and worry induced by a tumor of one of the mammary glands. Under this combined treatment she recovered about as rapidly as the case detailed by Dr. Bauduy. In both these cases the drug was administered in pill form, and probably because of its combination did not interfere with the free use of egg-nog and other concentrated food in large quantities.

I have now under treatment a case of melancholia in which I am using the drug with an atomizer, using about four grains a day, on the nasal mucous membrane. The stimulating effects on the brain are manifested in a very few minutes after it is used. I am of the opinion that cocaine is the most valuable recent addition made to the therapeutics of melancholia, especially if its bad effects are guarded against in the way suggested.

Fourth. Neurasthenia.—Cocaine is of value in the treatment of this tedious and perplexing derangement of the nervous system. Dr. J. Leonard Corning,* in his scientific review of the cerebral form of this disease, calls it "the remedy *par excellence*." Dr William Oliver Moore,† in a very valuable paper on the physiological and therapeutical effects of coca and its alkaloid, gives his personal experience and the observations of others as to the value of the drug in all depressed conditions of the nerve centres, as well as its effects upon himself in various doses.

My experience coincides with the testimony of these writers, but I observe the same care in sustaining the digestive function and stimulating the eliminations as stated before. Cocaine, as mentioned in the beginning of this paper, is

*Centralblatt für Nervenheilkund, July, 1885.
†Medical and Surgical Reporter, Aug. 15, 1885.
‡New York Medical Journal, Sept. 26, 1885.
§The Weekly Medical Review, Vol. XII, No. 17.

*Brain Exhaustion.
† Quarterly Bulletin, New York Post Graduate School, Vol. I, No. 1.

as powerful for evil as for good, and it requires no special prophetic gift to say that more disastrous results will be experienced by the laity from its indiscriminate use, than have been known from either opium or alcohol. Indeed, its action upon some persons in moderate doses is alarming. Dr. G. W. Kinnicutt* relates a case of poisoning from three and a third grains of the drug applied to the nasal mucous membrane, in the case of a female aged twenty-five, who had been using it for hay-fever. When he arrived she was in an alarming comatose condition, from which she recovered in about three hours, under the liberal use of brandy, ammonia, and digitalis, with heat to her extremities and epigastrium.

Dr. J. Spear,† U. S. Navy, publishes a case of alarming coma closely simulating opium poisoning, in a private, U. S. M. C., aged twenty-nine, the result of the hypodermic use of ten grains in divided doses, extending over about twelve hours. The case was supposed to be opium poisoning, and was treated with atropine, coffee, and flagellation, and in about nine hours he recovered from the immediate effect of the poison. Dr. T. H. Burchard‡ gives an account of a case in which the hypodermic injection of four-fifths of a grain produced a sudden and complete loss of consciousness, and in which respiration stopped, and the radial pulse was scarcely perceptible. Artificial respiration, hypodermic injection of one-twelfth grain of atropine, and sinapisms to heart and extremities, relieved the patient. Fifteen minutes after the prostration the pulse was forty-eight and very feeble, the respiration seven or eight, and the pupils contracted. Unconsciousness continued about twenty minutes.

Dr. Merriams§ relates the case of a gentleman who had been taking cocaine for four months for sick headache, beginning with about two grains a day, and gradually increasing till he was taking from ten to fifteen grains daily. He was very weak, with a pulse of 100, and his mind wandering somewhat as in delirium tremens. Drs. Bauduy and Shaw, in their papers already mentioned, dwell especially upon the dangers of the continued use of the drug in large doses. My experience is in accord with these several observers. Several cases of the poisonous effects of the drug have been under my treatment during the past six months, and I will call the attention of the society to two of these cases, both physicians:

First.—The case of Dr. W., aged about thirty, of excellent physique, of neurotic tendency by inheritance, who began the use of the hydrochlorate of cocaine upon the nasal and pharygeal mucous membrane for hay fever. He gradually increased the dose to five grains taken in one dose in the evening, when his attack of hay-fever was usually most distressing. This dose gave almost immediate relief, from the hay-fever, and gave a sense of mental stimulation very like champagne. He was almost at once seized with a desire for brain-work, and would pass the greater part of the night reading and writing on professional topics, experiencing a keenness of perception and a mental vigor greater than normal. He describes his sensation during the period of activity of the drug as exceedingly delightful. Towards morning he would fall asleep, and on the next day he would have no appetite and but little desire for work, the excessive stimulation having been followed by a corresponding depression of the vital forces.

He soon found a very irregular and rapid action of the heart, and passed by rapid stages to a condition of deplorable neurasthenia, from which he is slowly recovering. He had the same derangement of digestion, assimilation and elimination that have already been mentioned. He had but little desire for food, a thickly coated tongue, a feeeble digestion, considerable emaciation, urine scanty, and much of the time loaded with uric acid and urates, with dyspnœa and the irregularity of heart action before mentioned. The stools for some time were chalky, skin dry and pallid, pupils dilated, reflexes, especially the patellar tendon, much increased, and muscular powers much diminished.

He continued the use of the drug about ten days, and stopped it because he feared its enslaving power. This profound depression of the nervous system followed immediately upon its stoppage. The agents used to overcome this neurasthenia were an abundance of easily digested food, mild alteratives, moderate alcoholics, strychnine in small doses, cinchona, and the compound syrup of hypophosphites. As stated, the depression is gradually passing away, but the ten days' use of cocaine has incapacitated him for four months from the practice of his profession, and the probability is that at least three months more will be required to complete his restoration.

Second. The case of Dr. B., aged 35, a man of decidedly neuropathic temperament, a hard working, conscientious, and skillful physician, in the enjoyment of a fair but laborious practice, with an excellent family history. Three years ago, with my assistance, he discontinued the use of opium, which he had been using excessively. He began the use of cocaine last May in one-eighth grain doses, having been led to believe it to be a harmless stimulant, and being at the time much run down by excessive professional work. It gave him such a sense of

* Chicago Medical Journal, Oct., 1885.
† The Medical Record, Nov. 14, 1885.
‡ The Medical Record, Dec. 5, 1885.
§ Quoted by the Medical Record, Nov. 28, 1885, from Ohio Medical Journal.

well-being as he had never experienced from any agent before, the sense of complete repose and self-satisfaction it produced being much more marked and agreeable than that derived from opium. He gradually increased the dose until he consumed about 15 grains a day by hypodermic injection. The large doses soon began to produce mental disturbance; he became irritable, quarrelsome, impetuous, and considered himself to be possessed of a mission, and that to revolutionize the medical practice, claiming to be able to cure all diseases by the potency of cocaine. He gave it indiscriminately to all his patients. He gave it to obstetric cases and to syphilitic cases. He gave it to his wife, his three childen and his mother. He was formerly a modest man of science; he became bold and unscientific in his methods, went about engaging in lawsuits, carrying a pistol and frequently brandishing it in public places, threatening vengeance upon all who dared doubt the correctness of his various extravagant statements, a perfect terror in his neighborhood. He had been a very devout member of the Roman Catholic Church, but the priest of the church could now do nothing towards restraining his wild impetuosity. He neglected his practice and by his manner alienated those whom he did not neglect, so that he very soon lost it. Piece by piece his horse, his buggy, and his furniture disappeared, until his family was reduced to poverty. My repeated efforts to persuade him to stop the use of the drug were unsuccessful; indeed, simply resulted in making me the recipient of his wildest denunciations and of his severest threatenings. Several physicians and druggists who made attempts to restrain him met with an equally positive rebuff. The same general deterioration as before noticed, was manifest in his case, extreme pallor and dryness of the skin, great emaciation, loss of appetite and no desire for sleep, so that for at least one week he did not assume the recumbent position.

He continued to go from bad to worse until his friends thought it best to restrain him. In pursuance of this object Dr. F. L. WADSWORTH and I appeared before the County Court and advised his removal to the Washingtonian Home. Here the cocaine was gradually withdrawn, but his mental extravagance continued unabated. He left this institution clandestinely, and is now supposed to be in Canada.

To sum up:

1. Cocaine in small or moderate doses is a cerebral stimulant, but produces derangement of the digestive and assimilative functions, and diminishes the elimination of waste.

2. The use of cocaine in the alcoholic and opium inebriates is not satisfactory; while it is a more or less perfect substitute, yet its use is attended with greater danger than alcohol or opium.

3. The use of cocaine in mental depression, if we carefully guard against the depressing effects of the drug upon digestion and assimilation, will often give better results than any drug hitherto used.

4. The use of cocaine in neurasthenia is a valuable addition to the treatment.

5. The drug, if administered in large doses persistently, causes a very marked deterioration of the central nervous system, producing a profound cerebral neurasthenia, and may produce such a mal-nutrition of the cerebrum as to develop insanity.

6. Cocaine, occasionally, in doses heretofore regarded as small, produces alarming depression of the central nervous system.

DR. E. L. HOLMES opened the discussion by saying that the South American Indians ate large quantities of the coca leaf, without injury.

DR. D. R. BROWER said that in the early history of Peru the Catholic Church authorities sought to stop the use of coca in that way because of its deleterious effects upon the people. But it was impossible to do it, they used it clandestinely, and the prohibition was withdrawn. DR. BROWER said that used in that way the result was a similar condition of mental deterioration as that mentioned in the paper; while these people were capable, under its influence, of performing muscular efforts in climbing the hills and mountains of that country, they were a puny, sallow, emaciated people, with intellectual capacity very little above the brute creation.

DR. E. L. HOLMES said that his experience had been wholly in connection with local applications on the eye. He had seen one case, in which he had placed cocaine in both eyes for an operation, in which it was followed by considerable depression and nausea through the night, but no alarming symptoms. He had twice used it in his office for strabismus, placing a not unusual quantity in the eye, when the patient felt sick and almost slipped out of the chair, and the operation was performed with the patient lying on the floor, but he suspected it to be a fit of fainting at sight of the instruments. He had found from experience that very minute doses will be absorbed, but had never seen the slightest influence from the amount which is usually given in the eye. It is exceedingly satisfactory in performing operations, and in removing little motes and pieces of iron or steel lodged in the cornea.

DR. C. W. EARLE said it appeared to him that when DR. B. was in the Washingtonian Home he got along with a very small amount of the drug, very much less than DR. EARLE had anticipated it would be possible for him to get along with. That DR. B. had informed him that he had been in the habit of taking from 15 to 18 grains a day. After he went into

the Home, the first three days he took less than grs. iij, and after that time did not take any. He regained his appetite very well, and appeared to improve in every respect up to the time that his wife and brother or brother-in-law came from Canada to visit him, then he was seized with the idea that he must go home, or at least to Canada, and from that time he was uneasy and did not do well. DR. EARLE said that it seemed to him that there had been more said in regard to the use of cocaine than there was any use of saying. While DR. B. was at the Home he was not unlike an ordinary opium eater. The depression which followed the withdrawal was somewhat similar, although there were none of the symptoms of dizziness, or nausea and sneezing which are usually present after the withdrawal of opium.

DR. SARAH HACKETT STEVENSON said that she was surprised at the deleterious effects found by DR. BROWER from the use of cocaine in hay fever. She had had a number of cases in which it was used, without any of the symptoms mentioned in the paper. She had used a four-per-cent. solution, applying with a camel's-hair brush, or simply by snuffing. DR. STEVENSON said she had used cocaine a great deal hypodermically in surgical operations with good effect so far as anæsthesia was concerned.

DR. W. F. COLEMAN said there are two lines of practice in treating the narcotic habit: to cut a man off from his drug completely, at once, or to taper him off. He believing in depriving him of the drug at once. If he found a man being poisoned he would not add another dose, but stop it immediately. He knew nothing practically of the internal use of cocaine, but was surprised at the grave effect mentioned by DR. BROWER. COHN-MUELLER asserts that he kills a frog with a four-tenths of a grain, but to human patients he gave indiscriminately five grains and it produced no perceptible ill effect. Locally DR. COLEMAN had had some experience with the drug, and there is this point about its immediate effect, it relieves pain in acute otitis, but it is a grave question whether it does not prolong the case, and while it relieves pain, it is doubtful if it is better than hot-water or other remedies. In its application to the eye there was not this objection; it produces anæsthesia and allows almost any operation to be performed without pain; it does not prolong congestion, and gives permanant relief.

DR. D. W. GRAHAM said that he noticed DR. BROWER quoted a case reported by DR. BURCHARD in the Medical Record, in which a patient sustained loss of consciousness and stoppage of the pulse after an injection of four-fifths of a grain of cocaine. DR. GRAHAM doubted very much whether the bad effects were due to cocaine; we get the same effect in many patients by injecting water, or by showing them the hypodermic syringe, and he thought it probable that it was simply a fainting fit. There was nothing in the report that would lead to any other conclusion except that DR. BURCHARD says it was the result of the injection of cocaine. DR. GRAHAM doubted the conclusion and thought it unreliable.

DR. F. M. WELLER said he had had some experience in the use both of cocaine and the fluid extract of coca. He had never used such large doses as those mentioned, but had seen that very large doses of the drug would produce unpleasant symptoms about the head, dull heavy headache, something like doses of other narcotics. Hypodermically he had used as much as five grains at one time without any unpleasant effects whatever. He was inclined to think that the real difficulty in some of these cases was that some other circumstance was overlooked. It seemed to him that some idiosyncrasy might exist that would make one peculiarly susceptible to this kind of narcotic, and it would hardly be reasonable to charge it all to cocaine. His reading of the history of the use of the drug in South America, where it originated, led him to think that it could be used a long time without injury. He thought one lesson is to be learned from the paper, viz., that no drug should be continued beyond the time of its necessity. The principle laid down and strictly adhered to, the patient would never suffer from the deleterious use of any drug.

DR. D. R. BROWER in closing the discussion, said that DR. B. bought cocaine wherever he could get it, and he did not know what preparation he used. The other physicians mentioned in the paper used MERCK'S cocaine altogether. He used it for hay-fever and took five grains by inhalation every day for ten days. DR. BROWER said that he did not suppose that such disastrous effects as occurred in these cases and others, would result unless there was some weakness of the nervous system; he thought possibly a person perfectly robust and with a well-governed nervous organization could take cocaine with impunity, but a person with a nervous temperament could not use this drug continuously without some such results following. DR. BROWER said his plan of treatment was that of gradual withdrawal, as well with opium and chloral as with cocaine. This plan could be followed with less inconvenience to the patient. DR. BROWER said he was well aware that cocaine was one of the most valuable additions to the therapeutics of hay-fever; it had been administered in perhaps thousands of cases in Chicago, and with few disastrous effects. As to the case reported by DR. BURCHARD, the doctor reported it as a case resulting from hypodermic injection, and it struck DR. BROWER as being a reasonable result in a very susceptible individual, but it might be

that the man had a fainting fit. The case was reported in the Medical Record of Dec. 5, 1885, and it impressed Dr. Brower as being undoubtedly a case of cocaine poisoning.

After the reading of a paper entitled "Opium Smoking," by Dr. C. W. Earle, and one entitled "Hygienic Clothing" by Dr. L. L. McArthur, on which there was no discussion, the society adjourned.

CLINICAL LECTURE.

BY DR. ROBERTS BARTHOLOW, PHILADELPHIA.

CONSTIPATION.

In commencing my clinical course, I will say that it will be my purpose to bring before you clinically that which I teach didactically in the regular course. In our first patient, we find a woman complaining of constipation, which is extremely great. This may seem, at first blush, like a very trifling case to bring before you, but when you are in practice you will find that such cases are not to be lightly regarded, and that unless you study to comprehend them rightly, they will sorely tax your therapeutic skill. The woman never has a movement of the bowels unless she takes medicine, and even then, though she will have much pain and bearing down effort, the amount passed will be slight. In every other respect her health is good; you see for yourselves that her nutrition is excellent. What kind of constipation have we then? I take it that the muscular coat of the rectum and colon lack power; she experiences the sensation of desiring to pass her fæces, and though she contracts the abdominal muscles, they are not expelled.

Now, having established our diagnosis, what kind of remedy is indicated? Purgatives, of course, but what kind? It will never do to use them at random; we must specially adapt them to meet the indications. When the bowels are moved, the passages are fluid; there is more or less catarrh, so that we do not require drugs that will liquify them. To meet the indication of torpor, we will order pills containing three grains of aloes and one quarter grain each of extract of belladonna and nux vomica, thrice daily. If the secretions were deficient, I would add to this some extract of physostigma.

NERVOUS VOMITING.

This girl tells us that she vomits after every meal, yet she is rotund of figure and has rosy cheeks; she is not wasted, as would be the case were the vomitiong caused by organic disease of the stomach, so that there is something peculiar about this case. We may have vomiting from cerebral causes, from organic disease of the stomach or it may be reflex, or from uterine disease, but in all these instances there is an actual ejection of the food ingested and a consequent failure of nutrition. In this case the matter vomited is greenish and yellow, a bilious fluid and not the food contents of the stomach. To attribute it to nervous, hysterical causation will explain the phenomenon. In this case there is always distress after eating and the vomiting is attended with loud explosions of gas, sometimes exceedingly violent. You can readily understand that the ordinary remedies for vomiting will prove useless in such a case. As this girl is also costive, I will prescribe for her the officinal pill of aloes and assafœtida, three daily, the first one to be taken at night, and I will venture to predict a cure. You should know that in these cases of nervous vomiting there is always much more fuss made by the patient over the act than in the other forms.

HEMIPLEGIA WITH APHASIA.

This is a case of very great interest. On December 21st this woman complained of a tired feeling, but she was able to work. By the next day she found herself unable to write, though she could feel the pen within her fingers. On the morning of the 23d when she woke up she was unable to speak, and her face was drawn somewhat to the right, though there was no loss of consciousness. These abnormalities have now, in a great measure, disappeared. Here we have a clear history of hemiplegia with temporary aphasia. But in addition to these symptoms she now complained of a very peculiar weakness in the legs. There is no paralysis, she walks well, but every now and then, more especially in going up or down stairs, her legs will give way and she falls. These peculiar sudden weak spells are more liable to occur in the afternoon, and she suffers greatly from headache, more particularly at night. Right here I wish to impress upon you the importance of acutely observing the physiognomy of your patients; it will oftentimes reveal most significant features, and it must not be overlooked. As I stand in front of this woman and gaze intently at her, I note that the right eye is larger than the left, that is to say it is more protuberant and more of the white is visible. I must, however, caution you that the two sides of the face are rarely symmetrical. There will be noted, usually, a difference in the appearance of the eyes, the ears and the two sides of the nose, but in this case the difference is more than accidental, it is truly morbid. In studying physiognomy the labia-nasal folds (from the angle of the nose to the angle of the mouth) are of very great import; in this case the fold is deeper on the left side. A few days ago the tongue was deflected from a straight line when protruded, and there was some diffi-

culty in swallowing, but these latter conditions have now almost vanished. Now these conditions must, of course, be due to intra-cranial lesion, not localized, probably, nor situated alone upon one side, but most likely bilateral. Were it due to cerebral hæmorrhage, the recovery would not have been so rapid, unless the hæmorrhage was very limited. If, however, the mischief is caused by the embolic closure of an artery that has free anastomoses, the integrity of the circulation is quickly re-established and recovery is rapid. In this case there is no retinal lesion. The sudden giving way of the legs is symptomatic of certain specific cerebral lesions, of specific deposits, which view is strengthened by the condition of the eye and the nocturnal pain. The deposits must be removed, and for this purpose we will give this woman one-sixth of a grain of the green iodide and one-sixth of a grain of extract of belladonna three or four times daily, watching its effect. If the bowels should become relaxed, we will add to each dose one-eighth of a grain of the extract of opium.

A PATHOLOGICAL MUSEUM.

When we note this man's waxy appearance, and notice his difficulty of breathing, together with the œdema, there is not much difficulty in reaching a diagnosis. He passes an abundance of urine of low specific gravity, but there is no albumen; and this reminds me to call your attention to the pre-albuminuric stage of fibroid kidney, which does exist. His eyesight is good, though the ophthalmoscope reveals well-marked albuminuric retinitis. We have all the symptoms that ought to indicate albuminuria, but there is no albumen. For a long time this stage was not credited, but its existence is now undoubted. But in this case the supposed albuminuria is not the main point. The urine has a very deep color, which is due to bile. The history of the case points to lesion of the liver, though the abdomen is too much swollen to allow us to map out this organ. There is also a mitral murmur, which would indicate a condition that would account for the dropsy and for the anæmia. This man is really a pathological museum. He has fibroid degeneration of the liver, spleen, kidneys and heart, and bronchitis thrown in. We cannot hope to do much for such a case, but we must relieve the abdominal swelling and promote nutrition. For the first indication we will give him compound jalap powder, enough each morning to produce two or three stools, and for the second, ten drops of dilute nitric acid thrice daily, which sometimes produces very good results in albuminuria. After we have accomplished these two purposes, we must look to the general fibroid condition, but we must proceed carefully. We will then use the chloride of gold and sodium in doses of one-fifteenth of a grain along with the bichloride of mercury, in doses of one-thirtieth of a grain, in pill, thrice daily.

ARTIFICIAL DILATATION OF THE UTERINE CERVIX DURING LABOR.*

BY DR. W. R. CHITTICK, DETROIT, MICH.

Artificial dilatation of the uterine cervix, in cases where it may be practiced and where it is called for, is, in my opinion, a justifiable and worthy procedure, provided the operator understands just how to go about it. There are many cases of labor in which by judicious and reasonably prompt action on the part of the attending physician, much time and suffering may be saved the patient, if he chooses to practice this procedure.

I know many specialists are opposed to the practice of this operation and usually condemn it when opportunity is offered them to do so. Why they do so I cannot understand when they advocate operations and procedures that are fully as open to criticism, and are, in the minds of many general practitioners, looked upon with an unapproving eye.

This is a day of civilization, and consequently one of many artificial procedures. We cannot expect to find all women now-a-days having normal labors; if we were all in a state of nature it would be different, but even then there would occasionally be difficulties. The obstetrician of to-day must be armed with ergot, forceps, opiates and sometimes chloroform, and is not always slow to use one or more of them—especially the ergot.

Why then should we not practice a procedure that is advocated by some of our best practitioners—the more especially as it is one calculated to shorten the period of labor? The majority of confinements are severe enough; long hours of suffering are endured by mothers who, if they could, would soon shorten the time, and who many times are tempted to, and often do, take means to terminate the life of the fœtus, thinking that by that means they will lessen their sufferings as well as get rid of the trouble and care of a child.

If we can by any legitimate means shorten the time of child-birth I think we certainly ought to do so. When our patients call us in they expect to get some help from us, and if we educate and train ourselves to give them the greatest amount of relief that science and art can devise, then we will perform the functions of true physicians.

There is another reason why we should make child-birth as easy and as short as our knowledge and skill will permit, and it is that it will

*Read before the Detroit Obstetrical and Gynecological Society.

serve to make it less dreaded and encourage more wives to become mothers. Then again it will tend to lessen the number of miscarriages and abortions that are so common. It has struck me as a fact that criminal abortions are more common among the more intelligent women than among the so-called lower classes. So, if we can do anything to make the confinements of these women less painful in bringing into the world children who, with the advantages they would have, ought to make better men and women, and, therefore, add to the list of reputable citizens, we will accomplish a good thing.

In regard to the operation itself: As is now well understood, the dilatation of the os is produced by the contraction of the longitudinal fibres of the uterus, which are more numerous, longer and stronger than the circular fibres of the mouth of the womb. The contractions, as a whole, also serve to diminish the size of the womb, and thereby press upon its contents and tend to push out the entire ovum. The fœtus being surrounded by the liquor amnii does not directly act on the os, but the bag of waters becoming tense, offers something for the muscular fibres to pull over, and, being pliable, to protrude through the opening made. Now, on a little thought, it must appear clear to everyone that the result of the whole process is simply to open wide the mouth of the womb, mere mechanical dilatation, in order to allow it to expel its contents. Now, the first stage of labor is often protracted much longer than there is any necessity for, and by artificial dilatation we can shorten it from one to six hours.

There are two methods of artificially dilating the os: first, by digital manipulation; and, secondly, by using hydrostatic bags. I have had no experience with the bags, but can say that I have had excellent results from dilating the os with the fingers. I have had cases in which there seemed to be but very little dilatation produced by the natural means, in which, as soon as I applied my fingers, the pains seemed to take on a renewed vigor, and labor progressed happily. I had one such case that remained stationary from the middle of the night until eleven o'clock the next day, when I saw her for the first time, that I delivered within half an hour after first applying my fingers. Everything was ready for dilatation, but for some reason it did not progress.

I think that *gentle* manipulations are the best. There is no necessity whatever for the use of force, as the manipulations are simply expected to produce stimulation, and this exciting the uterus to renewed vigor, make the pains stronger—sometimes very strong. All that is necessary is to insert the first two fingers of either hand into the os *between* pains, and to gently widen them and run them around between the os and the membranes, especially at the anterior portion. Force should not be used because it is not necessary, and might prove injurious. Neither should the operation be hastened, for nothing is to be gained by it.

83 Lafayette Ave.

PREVENTION OF CORNEAL EROSION AND ULCERATION BY THE LOCAL APPLICATION OF OLEUM RICINI.

BY FRANK G. CONNELL, M. D., DETROIT, MICH.*

Ulceration and erosion of the cornea is the most untoward event that can happen in the course of a catarrhal or purulent ophthalmia. Children are common subjects of the misfortune. With them the corneal tissue seems especially weak and friable, while the orbicularis palpebrarum muscles are unusually strong and irritable, and easily grind the surfaces of the orbicular and palpebral conjunctiva together, producing the erosion and ulceration so justly feared.

It is not the mere loss of tissue from the cornea that makes it so desirable to prevent the lesions mentioned above, but it is the fact that when such lesions heal they are likely to leave the cornea opaque and impervious to light.

The principles which must guide the practitioner in his efforts to ward off an erosion or ulceration of the cornea, are based upon two principal conditions which I fear are not commonly measured for all they are worth. They are: 1. A constitutional weakness and fragility of the corneal substance, which is often remedied by the exhibition of cod-liver oil, potassic iodide, ferrous iodide—medicines of supporting and restorative character; and, 2. the spasm of the eyelids (blepharo-spasm), often associated with fear of light (photophobia) and which may be remedied by the use of anodynes, atropine sometimes, and section, with knife or scissors, of the external canthus of the eye, dividing the muscle which is in violent contraction.

The former condition is not infrequently overlooked by specialists, and the latter condition is as often overlooked by general practitioners. These gentlemen often boast of curing this or that case of chronic keratitis with cod-liver oil and constitutional treatment long after the specialist has exhausted the patient, in body and purse, with his local applications and too frequent manipulations. The specialist, too, reports with great pomp and pride that he has cured such and such a case of corneal erosion and pannus and blepharo-spasm, by an operation on the orbicular muscle; that the case had been in the hands of general practitioners who had disregarded the local lesions, while they plied the patient *ad nauseam* with constitutional remedies.

* Instructor in Chemistry, Detroit College of Medicine.

There is a happy medium for the management of these cases, and the successful practitioner will, of course, select it. Many cases may be prevented from progressing to that extreme degree, and this paper is written for the purpose of extolling the virtue of castor oil, when properly used, as a means to that end. It possesses a property of adhering and diffusing over inflamed mucous surfaces that is not possessed by other oils. It is an effectual and competent lubricant for mucous membranes. When the conjunctiva is smeared with it, it adheres and penetrates the folds and envelops the asperities of that tissue, forming an elastic layer of protective, which prevents friction and consequent erosion of the cornea by the lids.

It is my custom to use it freely in all cases, particularly in infants and young children, where there is danger of the cornea becoming softened by the heat and pressure incident to inflammation. Its action in the conjunctival folds and on the surface of the cornea is perfectly consistent with the principles of treatment mentioned previously, and in my experience does not interfere with any other treatment that may be demanded by these cases. With young children whose conjunctiva is inflammed, the cleansing of the diseased surfaces is no easy matter. The oleum ricini facilitates greatly the toilet of the cornea.

A CASE OF CHOREA WITH PECULIAR NERVOUS ANTECEDENTS.

BY E. J. KAUFFMANN, M.D., L.S.A., ENG., L.F.P.S., GLASGOW, ETC. NEW YORK CITY.*

A case has lately presented itself that illustrates most thoroughly how all the members of a family may be heir to nervous symptoms, transmitted by the father or mother.

PHŒBE MARX, æt. 17 years, has been sick since seven years of age with chorea, which first made its appearance at that period, following measles; she has had chronic symptoms, more or less marked, all of this time, which disappeared at intervals under treatment, but persistently returned. The father of this girl is very nervous and has always been so; is hysterical. The mother, æt. 42, is a very nervous woman, was hysterical to within a short time ago and is just recovering from a "parametritis atrophicas chronicus" (Freund), a sclerotic condition of the parametrium in which especially the nerve fibres and ganglia are involved.

The eldest daughter, æt. 23, has facial chorea. The second daughter, æt. 14, has a blepharospasm and is excitable and hysterical. One son has a paralysis of left arm, and the youngest son has had for the past year, chorea The neurotic elements can be traced through the mother's family.

This case is of especial interest. It is well known that chorea occurs most frequently in families in which nervous diseases are hereditary, but seldom do we encounter such a purely nervous history as this one. There are so many conditions which we know are capable of producing choreic symptoms, that we can almost always elicit some cause apparent from the patient. It is far more frequent among the poor. Want of proper food, neglect, ill-usage, with the weakness and anæmia induced by these means, are very common antecedents. This patient is supplied with all the necessaries of life. An intimate association between chorea and rheumatism has long been recognized; bad habits, and disorders of menstruation, are also said to sometimes induce chorea. Intestinal worms, fright, etc., all of which are causes, were absent in the patient referred to. Some of the movements are imitative and can be much improved by pressure on the nerve supplying the muscle or muscles in which the spasms exist.

Liquor potassii arsenitis is prescribed and administered most frequently hypodermically, with very good results.

Zinci sulphatis, iron, cod-liver oil, are the most important medicines.

Any recognized cause should be removed, such as constipation or worms, and should be carefully looked for in children.

If any rheumatism KI and ammonia are good. Good food, rest, fresh air, etc., all come in for their share, and must never be forgotten—in some cases they form the most important treatment.

* Physician to Manhattan Hospital for Nervous Diseases.

Correspondence.

PASTEUR AND THE PREVENTION OF HYDROPHOBIA.

While all the world is running mad, I thought a brief account of M. PASTEUR'S experiments in inoculating for the prevention of hydrophobia might interest you and your readers.

I had the pleasure last week of seeing the eminent scientist inoculate the four children from Newark, N. J.

M. PASTEUR does not perform the operations himself, as he is not a graduate in surgery, and the French law punishes by a heavy fine any one not holding a diploma who performs any surgical operation, so M. PASTEUR has his assistant, DR. GRANCHET, perform the manual part of the treatment.

Arriving at the laboratory I was ushered into the same room where a man died last month from rabies. He had been severely bitten several months ago, and was seized with con-

vulsions soon after reaching the laboratory, and died in a few hours.

I had been in the room only a few minntes when in came the four American boys, accompanied by MRS. RYAN, the mother of the youngest patient. DR. GRANCHET injected the virus by means of a large hypodermic syringe, beneath the skin covering the abdomen. The children felt a little frightened at first, but laughed when the operation was over, and left with instructions to return daily for ten or twelve days.

You, doubtless, have read of the manner of obtaining the attenuated virus. A rabbit is inoculated with virus taken from the brain of rabid dog, and dies. Virus is then taken from the brain of this rabbit and another rabbit is inoculated with it, and so on, till about thirty rabbits have contributed to the cause. The last rabbit is not killed by the virus, but is put to death by the surgeon, and the virus taken from its brain and used for the inoculation of human patients. The part of the brain used is the medulla oblongata. M. PASTEUR thinks that this part of the brain is the reservoir where the rabiotic virus is deposited by the blood.

The microscope has thus far failed to reveal the deadly germ, but the physiological tests leave little room to doubt M. PASTEUR'S demonstration.

M. PASTEUR'S laboratory at No. 45 Rue d'Ulm, near the Sarbonne, contains a large number of cases of rabbits, dogs, and other animals in different stages of hydrophobia; it reminds me very much of the physiological and experimental laboratory which my uncle established during the palmy days of the old Detroit Medical College, and which he modeled after the laboratory of the late eminent physiologist, CLAUDE-BERNARD, in the College de France, of this city. It is remarkable how the French have worked and pushed ahead to encourage scientific research in this city, and in every part of the world. M. PASTEUR is about sixty years of age, short, thick-set, and active. I had a long talk with M. PASTEUR, and was very pleasantly entertained, and was shown through the many rooms of his well-equipped laboratory.

There is no doubt that there is a great scare about hydrophobia in Paris, France, and the whole of Europe, and I guess it is reaching to America. Many eminent men dispute the correctness of PASTEUR'S conclusions; but no one questions his genius. His position as a scientist of transcendent ability was assured long before he began the experiments which are bringing him so much attention. No one who has been inoculated has as yet permitted himself to be bitten by a thoroughly rabid dog, for the purpose of testing the efficacy of preventive inoculation. And until that is done, there will be plenty of men who will question PASTEUR'S discovery. M. PASTEUR was given a pension of $5,000 a year a few years ago. It was soon after the conclusion of his famous experiments, proving the groundlessness of the doctrine of spontaneous generation. And since then he has said little or nothing about generation *de novo*, or *sui generis*. It is a well-known fact here that since the days of LA FONTAINE no one has disturbed the poetry of the church as has PASTEUR with his hermetically-sealed tubes, and the germs which developed speedily after exposure to the air and light.

There are men in Paris mean enough to say that the church disliked his doctrines and experiments, and that she purchased his silence on spontaneous generation with the government pension.

In America PASTEUR'S work, as it is reported in the Parisian papers, would give the code of ethics of the American Medical Association a hard rub to keep him within the boundaries of professional regularity.

I can see the look of disapproval which the straight-laced and eminently respectable PROF BRODIE would give the man who allowed his name to get into the papers so often and with so little provocation.

HAL M. WYMAN, M. D.

PARIS, FRANCE.

PAINFUL MAMMÆ IN YOUNG GIRLS.

In the MEDICAL AGE of Dec. 26th, 1885, I noticed an article from the pen of J. N. MORGAN, upon "Cases of Painful Mammæ in Young Girls." Of said ailment he appears to be unable to give the cause. In my experience of thirty years, I have had, as all other physicians have, a great many of these cases, and not one did I see but was in the habit of wearing the health-destroying, but to them the indispensable article of female attire, the corset—the foundation of so many uterine diseases.

It must be remembered that nature cannot sit quietly by and see the daughters of our noble mothers ruined without giving some demonstrative warning. The nervous system in some is very sensitive, and especially so in the young female, just before she is budding into womanhood. Remember the bones in the young are soft and easily moulded into almost any abnormal form; hence, the ribs have been made to lap, one over the other, by tight lacing; the proper circulation and development thereby nearly, or almost, brought to a stand-still.

Should it then be strange to have pains in that locality, when we know that there does exist the greatest sympathy between parts of the uterine organs and the mammæ of the female? The sympathetic nerve (so called from

the opinion entertained that through it is produced a sympathy between the affections of distant organs), the dorsal ganglia, solar plexus, and superficial cardiac plexus, must be affected by tight lacing. Some makes of corsets are so long in their points as to rest on the mons veneris, when the female is in a stooping or sitting posture, thus causing additional disturbance. Hence, if the young female would throw aside the corset, she would develop into such a being as would deprive the medical profession of a large percentage of its earnings, and soon our slumbers would not be broken at night time to prescribe for some poor, nervous, broken-down woman, who had become an object of pity to all who know her.

J. B. SULLIVAN, M. D.

STANTON, Mich.

THE INJECTION OF HÆMORRHOIDS.

The injection of hæmorrhoids for radical cure, is the most important discovery in surgery for many years. Its importance appreciates when we consider the simplicity and ease of the operation, and the very large number of persons to be benefitted by it.

It was first discovered and practiced by irregular practitioners; but now that its value is demonstrated, the discovery belongs to the regular profession.

One college professor who taught me how to operate said that it was very unsafe to inject except some clamp is applied to the base of the tumor to shut it off from the circulation, because of the danger of coagula entering a vein, to be deposited in the liver or lungs.

The articles recently published in the AGE make no mention of the use of a pile-clamp. How is this? Is it safe to operate without using a clamp? It would certainly be much easier. Will some reader please give us his views on this subject?

N. P. BLAKESLEE, M. D.

ELMIRA, MICH.

COCAINE IN MINOR OPERATIONS.

In December last I operated on a Mrs. G., removing a tumor, weighing a half pound, from the axilla. I injected 1½ grs. superficially and deep along the line I intended making the incisions; after waiting about ten minutes I commenced cutting. She said she could feel a dragging sensation along the line of incision, but there was absolutely no pain, and even when separating the tumor from the deep tissues she did not feel the blade or the handle of the scalpel, which was freely used.

I also removed a cancer from a lady's breast under similar circumstances in this city, with the same results.

In both cases the patients were chatting and joking with myself and friends present. I am of opinion that cocaine can be used in all cases of minor surgery and that it is both safe and reliable.

S. EDWARD MCCULLY, M.D.

TORONTO, ONT.

MURIATE OF COCAINE A HÆMOSTATIC.

Jan. 8th Mrs. S., aged 58, presented herself at my office for the removal of two sebaceous tumors of the scalp, each about the size of a small marble, one situated in the right parietal region, the other in the left parietal. To the left one I made three applications of a four-per-cent. solution of muriate of cocaine. To the right one I made no application. The former was removed with no pain and a loss of not more than three drops of blood, and never oozed a drop afterward. The latter was quite painful, bled freely and oozed a little for twenty-four hours afterward.

A. G. BRUCE, M.D.

ALBION, MICH.

A doctor out west has sued a railway for $10,000, which is the amount of damage which he claims to have resulted to his body, and peace of mind, through an abscess in his nates, the said abscess being alleged to have been caused by the company's negligence. It appears that the doctor combined politics with medicine, and had taken a ticket to a democratic convention. The coaches being full, he repaired to the baggage car, where he sat down on an egg-crate, from which protruded a nail which the company had neglected to polish. The result was that the rusty nail became imbedded in the place necessarily utilized when one sits down, and an abscess followed. The railway company will, doubtless, urge in defending the suit, that the doctor was guilty of contributory negligence. He was not invited to sit dow on the egg-crate, and after selecting that seat, he should have satisfied himself that no nail stood ready to receive him on unpolished point. Are railway companies obliged to keep nails from protruding from egg-crates on their baggage cars? And if not, are they legally bound to keep protruding nails polished and free from rust? Then, again, did the nail cause the abscess? Might not the abscess have been a common boil? Was the doctor's blood in a proper condition to have resisted the injury? In answer to the last question stands the fact that he was a democrat and on his way to a democratic convention, and during a heated presidential campaign. Were the customary liquid stimulants present or absent? If it appears that they were present, was the doctor's blood not "heated," and thus predisposed to abscesses? Questions of this nature will, doubtless, be put to the expert witnesses, and the answers will depend very much on the political biases of the latter. The case will thus prove an interesting one from a medico-politico-legal point of view.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

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Editorial.

THE ETHICS OF THE PROFESSION.

By the ethics of the profession we understand certain rules of duty, as between members of the profession themselves and as between the profession and the public. These rules are based on such conceptions of right and wrong as obtained among the representative men who formulated them. The code by which the majority of the practitioners of this country are tacitly governed, was formulated over a third of a century ago, since which time there have been many changes, and, it is hoped, improvements, in the relations existing between the members of society, and even in the prevailing conceptions of what is abstractly right and wrong in society generally. While there are certain ethical principles which are fixed in the very nature of things, very much of what passes for right and wrong is such through fashion and conventionality. "As ye would that men should do unto you do ye even so unto them," is, for instance, an innate moral principle without which religion would be hollow mockery, but there was a time when it was held to be right, and even essential to salvation, to entertain certain views touching Deity and future reward and punishment, the truth or falsity of which could not, in the very nature of things, be demonstrated. To-day, however, a man may be even a member of the most orthodox of churches and hold such views regarding the latter matters as he may individually elect. The tendency in this important direction is to great liberality in the matter of non-essentials. In spite of tenets the honest promptings of the heart are coming to be held as the safest guides to conduct, and orthodox churchmen are becoming more and more tolerant of the expressions of such promptings.

The changes hinted at are not confined to religious affairs. They are noticeable in the practice of physicians, the inflexible code to which they have subscribed to the contrary, notwithstanding. Since this code was first promulgated there have been great mutations in the relations of physicians to each other and to the public, and methods have adapted themselves thereto. Practices condemned under the code are now winked at by those occupying front seats in the profession, and the indications are that the time is not distant when many of the provisions of that instrument will be as dead, though still living, as are the blue-laws of New England. The changes in professional sentiment touching what is the correct thing to do as regards the public, and what is the proper way for one physician to treat another, are probably nowhere more manifest than they are in this city, a city the profession of which has always taken pride in its fidelity to the letter and to the spirit of everything issued under the imprimature of the American Medical Association. The city rejoices in the residence within its borders of certain physicians who stand high in the professional councils of the Nation, and who feel it to be their especial mission to "elevate the profession," and who are instant in season and out of season, in impressing on all whose ear they can fasten to, the necessity, in order to gain such elevation, of an unquestioning faith in the unerring wisdom of everything said and done by the American Medical Association. Detroit need not fear the fate of Sodom and Gomorrah, for there are enough righteous men, and to spare, within her gates to prevent the catastrophy which befell the absolutely wicked cities of the plain. In view of this pre-eminent circumscribed goodness, it is, we think, quite safe to regard any professional conduct which receives even its quasi-endorsement, as conforming to more advanced professional sentiment, and that, too, in spite of anything bearing on the subject in the Code of Ethics. Now, there have recently been several noteworthy departures in this city from the practice formerly held to be strictly ethical. Prominent among these is the establishment of what is practically a health-insurance association, the payment of five dollars insuring ticket holder a bed in a hospital with board, medicine, nursing and treatment in the event of his becoming sick during the year subsequent to such payment. The American Medical Association, some years ago, condemned, by resolution, the contract system, or the practice of charging a family a fixed sum per annum for treatment, in lieu of such fees as might accrue from attendance in possible cases of sickness. The medical officers of the local institution which is clearly covered by this resolution, are members of the Association, and one of them was elected president of the leading local medical society, his election being interpreted as an endorsement of the institution with which he is connected.

Another violation of what was formerly considered ethical, occurred last week, in the admisson of reporters of the daily papers to a

local society's meeting, and the publication by them of the papers read, with a synopsis of the discussion thereon.

We refer to the above cases not so much to condemn them, as to illustrate the fact that the general consensus of the later professional opinion, fixes as obsolete old-time notions of what is ethical. These departures, we say, have been either directly or tacitly endorsed, and the effect on general professional conduct will be awaited with interest. If a hospital association is permitted to thus insure against sickness, what is there to prevent an association of practitioners, or even an individual practitioner, from extending the practice to families? And if a medical society is permitted to advertise its members through the secular press, why may not individual physicians resort to the same medium for acquiring the publicity which is generally held to have a beneficial effect on the practitioner's income? These are questions which the rapidly increasing keenness of competition may press to a solution in the near future.

TEMPERANCE SCHOOL-BOOKS.

We took occasion during the agitation of the question of the introduction of temperance school books in this state, to point out the objections to such introduction. In a recent issue of the Polyclinic DR. HENRY LEFFMANN takes a similar position and vigorously defends it:

It is not unnatural that those who are deeply and sincerely interested in a reform movement will occasionally be over-zealous, and that the liability to such excess will be most marked in causes of greatest and deepest interest. That the movement which is now manifesting itself in various parts of the world—but particularly in English-speaking countries—in opposition to the unrestricted use of alcohol, is a reform movement of great vitality and force, cannot be doubted for a moment by any one who is familiar with social evolution as exhibited in history. Whether it takes the form of high license, text-books schemes, prohibition platforms, temperance crusades, or even the more recondite theories of those who teach that inebriety is a disease, all are but indications of a powerful influence tending towards a restrictive system. However great may be individual sympathy with the purpose of such a movement, it is not to be expected that all the irregularities and unwise methods of the more enthusiastic votaries can be received without protest, and it is certainly with a strong protest that we must meet the most recent method of the teetotallers. Under the influence of that careless spirit which actuates our State Legislatures whenever a question of mere sentiment is concerned, it has not been difficult, in many cases, to secure the passage of laws requiring instruction to be given in the public schools in reference to the nature and effects of alcohol and alcoholic liquors. To any one who knows the influence and motives which control the legislative bodies, the enactment of these laws must seem simply ridiculous. They are passed without much difficulty, because they enable the local statesman to secure, with small risk, a reputation for moral feeling and advanced reform principles. They threaten no vested interest. The makers and sellers of intoxicating beverages know well that such laws will be of little influence, and they make no fight against them. Let, however, a movement be set up, such as the high license system or the prohibition scheme, and at once the powerful vested interests are arrayed against, and are freely taxed to secure the defeat of, the opposing measures.

The ease with which the temperance school-book law passed, is not an evidence of the strength or tendency of public sentiment, but merely that shrewd men feel satisfied that it will be entirely ineffective.

One might afford to join in despising the law, and awaiting the demonstration of its failure, if it were not that some indirect results of its enactment, and of the insufficiency and enthusiasm of its promoters, call for public notice and condemnation.

There is no doubt, for instance, that under the stimulation of the law, a large number of text-books of a highly strained and artificial character have been produced; that prominent book firms are now engaged in spending large sums of money for the purpose of bribing and corrupting those who have the control of the text-books in the schools; and further, that a strong effort is being made to secure the endorsement of particular books, not because they have scientific merit, perspicuity, or capabilities of instruction, but because they conform to an arbitrary standard largely sentimental; in fact, because they are "orthodox" on the question.

We are impelled to these remarks by the receipt of a circular, in which some leaders of the temperance movement take occasion to recommend strongly special text-books, on the ground that they are the only "safe" ones for use. The circular shows well the over-zealous character of the recommenders. They declare that the books ought to be "scientifically accurate," but yet object to any book which fails "to set forth the danger attending all use" of alcohol as a beverage, when there is really no demonstration that has any pretence to scientific value that can be adduced in favor of such a sweeping assertion. Some text-books, we are told, "fail to present the scientific truth concerning opium and tobacco." It might well be asked, what is the scientific truth about

these agents? Surely there is more obscurity on these points than there is with alcohol.

It is noted, in the same circular, that most of the books which are condemned "have many marks of real worth as treatises on physiology," but they do not come up to the tests which the new law requires, and, therefore, they must give way to volumes of inferior merit as instructors, but of "orthodox" principles. Some of these books, we are told, are very good, but are not fully in accord with the "latest science," the latest science being, it appears, to make unsupported and dogmatic statements in regard to the injurious effects of alcohol.

We could afford to smile at the dogmatism of these school-book theorists, if it were not that the success of their plans has introduced a large amount of corruption into the already highly corrupt system of text-book supply for schools.

QUILLAIA SAPONARIA AS A SUBSTITUTE FOR SENEGA.

The Pharmaceutische Zeitung reports that in July last KOBERT, of Strassburg, directed attention to quillaia bark (from quillaia saponaria molina) and recommended it as an excellent substitute for senega, holding that while it did not possess the unpleasant properties of the latter, it fully equaled it in efficacy. While the different lots of senega root contained too active glucosides in varying quality, KOBERT found the same in quillaia in five times larger quantity, and in constantly uniform quantity. He also stated that quillaia contained a good deal of sugar, and that the one substance which causes the disagreeable tast of senega is absent in the quillaia. On the basis of numerous experiments he concludes: 1st. That the patients bear the remedy better than the senega, and that it causes only in rare cases vomiting or diarrhœa; and, 2d. That the expectorant properties of the remedy are entirely beyond question.

The assistant physician in the city hospital at Nuremburg, DR. GOLDSCHMIDT, has made experiments concerning which he reports as follows:

As regards the manner of applying quillaia according to the proposition of KOBERT with adults, a decoction of five grammes of the bark was given. To children a decoction of three grammes to 180 grammes of water and an addition of 20 grammes of syrup. Of the mixture a teaspoonful was prescribed every hour. In obstinate cases the doses could be increased to seven grammes per hour. We desisted from prescribing the article in the shape of a powder. If we sum up the observation made upon the action of quillaia, it is undoubtedly shown that it possesses equal expectorant properties with radix senega, while it has the important advantage of a lower price, the cost not being over one-tenth of that of the latter, while its active principle is five times larger than that of senega. Aquillaia bark therefore can justly be called an excellent substitute for senega. It contains the same good properties, is equaliy free from untoward effects.

SOMETHING NEW IN THE TREATMENT OF HYSTERIA.

The following amusing account is given of the way in which a prominent physician of Paterson, N. J., treated a case of hysteria in a male. The physician was summoned to attend a person who was said to be suffering from cramps, and the following is the statement made subsequently to the police justice by the patient, of the treatment he received: "When the doctor arrived, I was on the lounge in great misery. He felt my pulse, and then began to cuff me, first on one side and then on the other. Then he hit me in the eye, and kocked me off the lounge, and wiped the floor with me. I want him arrested."

"Perhaps it was some sort of treatment the doctor was giving you," suggested recorder GREAVES."

"What! knock a man on the head and hit him in the eye for a pain at the pit of the stomach? No, I guess not! I want him arrested."

The warrant was, after a while, issued, and the doctor, in his turn, made a statement of the affair: "Why," said he, "I found the man suffering from hysteria. His pulse and condition showed that he really had no such cramps as he described. No doubt he thought he had, but it was a purely nervous trouble. I tried to engage his thoughts and get them off the apparent seat of pain, but being unable to do so in any other way, I had recourse to the old-fashioned method of making him angry: I slapped his cheeks and rubbed his ears. As soon as he got angry he experienced a change of the current of his thought, and the attack of hysterics was over. That ended the pain. That is a frequent remedy in a hypochondriacal attack."

What the result of the arrest was does not appear, but the physician was probably discharged.

Journal of Reconstructives is the name of a new quarterly periodical. It is devoted to a consideration of dietetics in disease, is edited by DR. WALLACE WOOD, and published by JOHN CARNRICK, of New York. The first number displays evidence of the fact that a very good journal may be gotten up on its special subject.

Notes.

We observe that DR. PIFFARD has retired from his editorial connection with the Journal of Cutaneous and Venereal Diseases, leaving DR. P. A. MORROW in sole editorial charge. This is the only publication in the English language devoted to skin and venereal diseases, and during the three years of its existence it has won for itself a high reputation for scientific excellence as well as practical utility. Judging from the handsome appearance of the January number, which is enriched by an admirable chromo-lithograph and a number of well-executed wood cuts, and the eminently practical character of its contents, this high standard will be maintained in the future.

DR. EPHRAIM CUTTER holds that an average of about one in 50,000 human spermatozoa, is a monster, having two or three heads, or bodies, or tails, as the case may be. He suggests that the chance impregnation of the ovum with one of these spermatozoa may be the cause of irregularity of development in the offspring. An ingenious theory, but one which will, probably, never be verified.

COUNT DE LESSEPS is now 80 years of age, but his usefulness is not confined to the digging of canals. He cut through the Isthmus of Suez and promises soon to have his ditch across the Isthmus of Panama *une fait accompli*, but in spite of these drafts on the energy of the octogenarian, he has recently added to his family a daughter. He, doubtless, believes that it is better to wear out than to rust out.

A very correct matron was shocked at the discovery that her daughter was studying physiology and hygiene. She sent a note to the teacher, in which she said: "I don't want my daughter to be taught about her insides; it isn't right, and I don't like it."

DR. HERMANN RIETZE, of Cheboygan, Mich., writes that he has found to answer a good purpose in hiccough, after other means had failed, granulated sugar saturated with dilute acetic acid.

An epitaph:

> Here rest the bones of SUSAN LOWDER,
> Who burst while drinking a Seidlitz powder.
> Alas! she's gone to her Heavenly rest;
> She should have waited 'till it effervesced!

HOLMES says that science is the topography of ignorance. From a few elevated points we triangulate vast spaces enclosing infinite unknown details.

The best thing yet discovered for sea-sickness is port.

Medical Progress.

THE PNEUMATIC TREATMENT OF RESPIRATORY DISEASES.[1]—E. DARWIN HUDSON, JR., in the New York Medical Record, Jan. 9, 1886, presents a summary of the methods and forms of apparatus devised for the pneumatic treatment of respiratory diseases. As this is a subject which we do not remember to have seen exhaustively treated of in text-books, we quote DR. HUDSON'S article *in toto*:

The introduction to the medical profession of the pneumatic cabinet, or pneumatic differentiator, of MR. JOSEPH KETCHUM, has created a renewed interest in the entire question of the value of compressed and rarefied air as therapeutic agents. The fact that PROF. BOWDITCH, of Boston, and the late PROF. ARMOR, of Brooklyn, had consented to stand in an advisory relation, or as sponsors, to those having its construction and use in charge, afforded a guarantee that it was a scientific apparatus, constructed to fill the recognized principles of pneumatic treatment. And the detailed and favorable reports of DRS. WILLIAMS,[2] V. Y. BOWDITCH,[3] BOUGHTON,[4] and JENSEN[4] have already established the claim of the cabinet and method of employing it to careful consideration and trial.

The subject is one which has occupied the medical mind periodically for nearly a century. As far back as 1800 the Royal Society of Haarlem[5] proposed as a subject for competition "The Influence of Condensed Air on Animal and Vegetable Life." Nothing of value was elicited. Again, SIR JOHN SINCLAIR, following observations upon lower animals, suggested the application of condensed air to the treatment of human disease. But the great treatise of LAENNEC, in 1819, makes no mention of pneumatic treatment. In 1835 M. JUNOD[6] made the first authentic experiments as to the influence of compressed air on the human body. MAJENDIE and his colleagues reported adversely upon M. JUNOD'S conclusions, but at a subsequent period the French Academy, with full appreciation, reversed its verdict, and awarded M. JUNOD a medal of honor. Attention became fixed as to the significance of pneumatic therapeutics. Efforts were made, as expressed by RAMADGE,[7] at "establishing the normal relation between inspiration and expiration." RAMADGE'S tubes are pictured and described in his translation of LAENNEC. Definite treatment by immersion of patients in reservoirs of compressed or rarefied air was conducted from 1850 to 1857 by TABARIÉ,[8]

[1] Read at meeting of Section of Practice of Medicine of the New York Academy of Medicine, December 15, 1885, as a part of discussion of Mr Joseph Ketchum's paper on The Physics of Pneumatic Differentiation.

[2] H. F. Williams: Antiseptic Treatment of Pulmonary Diseases by Means of Pneumatic Differentiation, New York Medical Record, January 17, 1885. Pneumatic Differentiation, New York Medical Journal, Oct. 5, 1885.

[3] Boston Medical and Surgical Journal, July 16, 1885, and Journal of the American Medical Association, August 1st, 1885.

[4] Journal of American Medical Association, November 7th, 1885.

[5] Walshe: On Diseases of the Lungs, p 332. London Edition, 1871.

[6] Séances de l'Academie des Sciences, Août, 1835.

[7] Translations of Laennec on Médiate Auscultation, p. 862. London, 1864.

[8] See Walshe, p. 333. London edition, 1871.

BERTIN,[1] of Montpellier, PRAVAZ[2] and MILLET,[2] of Lyons, and A. SIMPSON.[3]

TABARIE'S spheres were of iron, and would hold from one to twelve persons He advised sittings of two hours' duration, with an increased pressure of from one-half to two-thirds of an atmosphere. A course of thirty to forty sittings was advised for radical cure.

BERTIN pursued similar methods, employing, as did PRAVAZ and others, the spheres of TABARIE. He reported the cure of fifteen cases of uncomplicated emphysema, and of ninety-two cases of nervous and catarrhal asthma, with associated emphysema. Sixty-seven are reported as cured, twenty-two as benefited, and three as unsuccessful. Air-chambers, cumbrous, expensive, and not portable, were thus far used.

I. HAUKE,[4] of Vienna, is said to have first devised available portable apparatus for therapeutic uses, and to have led WALDENBERG to give his attention to the subject.

WALDENBERG devised the apparatus now bearing his name, and accumulated physical data and clinical observations enabling him to formulate a system of pneumatic therapeutics.[5] He devised a simple and portable apparatus for condensing and rarefying air, without delay, for consecutive or alternating use at the same sitting. It has been well compared, by DR. J. H. EMERSON,[6] as to appearance and principle, to the storage vats for illuminating gas. One cylinder, with an open end downward immersed in water, within a second and larger cylinder. By means of lateral uprights, with cords, pulleys, and graduated weights, the upper cylinder may at will be lowered and raised, and its contained air either condensed or rarefied. Tubing and a mouth-piece complete the apparatus.

In determining the indications for pneumatic treatment in different thoracic diseases, WALDENBURG was largely guided by the causes of dyspnœa, whether the product of inspiratory or expiratory obstruction, or both. He concluded that in emphysema retarded expiration is alone the cause of dyspnœa; that in stenosis of the upper air-passages, and in most forms of bronchial catarrh, including submucous thickenings and bronchial distortions, inspiration alone is interfered with. In phthisis he regarded inspiration as chiefly obstructed; expiration also, but to a lesser degree.

For the above conditions he employed condensed and rarefied air in accordance with his conception of the chest dynamics as related to the pneumatic forces at his command.

His methods may be briefly summarized as follows:

1, The inspiration of condensed air; 2, the expiration into condensed air; 3, the inspiration of rarefied air; 4, the expiration into rarefied air. The second method, expiration into condensed air was found impractical; the third, inspiration of rarefied air, was found of doubtful value and often attended with danger. The first and fourth methods, viz., inspiration of condensed air, and expiration into rarefied air, alone were announced to be of value. The inhalation of condensed air was regarded as the method indicated in all cases of stenosis of the upper air-passages, in contraction of air-passages, obstruction, occlusion, or collapse of terminal tubes and air-sacs; the expiration into rarefied air was demonstrated the correct method indicated for the treatment and radical cure of emphysema.

Concerning the latter method, the subsequent testimony of very many observers is cumulative and enthusiastic. The testimony as to benefit from pneumatic treatment in chronic bronchial catarrh, caseous phthisis, chronic interstitial pneumonia, contracted chests from pleuritic adhesions and pleuritic thickening, is less unanimous. The introduction of a cabinet like that of KETCHUM and WILLIAMS, which enables the patient to combine inhalations of atmospheric air, heated air, and medicated at the barometric pressure of air as ordinarily inhaled, with diminution of atmospheric pressure on the thoracic walls and peripheral circulation of the entire body, will help to solve the many unsettled problems of pneumo-therapy. This cabinet is, then, the most complete yet offered to scientists and the medical profession for the clearly-formulated principles of pneumatic-therapeutics given to us by WALDENBURG. DR. MITCHELL BRUCE[1] has well said: "Air stands in a dual relation to the economy as a definite compound of certain gases, and as an atmosphere with a certain pressure." The apparatus of WALDENBURG, approaching the mouth only in inspiration or expiration with a column of condensed or rarefied air, did two things: 1, Afforded either an increased or diminished supply of oxygen; 2, produced increased or diminished pressure on the interior of the air-passages and pulmonary vesiculi.

The cabinet of KETCHUM and WILLIAMS does all this, and further, removes pressure from the peripheral circulation of the entire body, inducing determination of blood away from internal viscera to the surface, drawing the chest-wall outward, increasing its capacity. This being done at the same time that the inspiration of atmospheric air (relatively condensed air) dilates the bronchi and vesicles, and compresses their vascular channels, the promise of increased chest capacity, and re-opening of contracted tubes and collapsed alveoli is very great. How far this is desirable, safe, and curative, only cumulative testimony can determine. To this purpose the wisest precautions have been taken by the projectors of the cabinet and its method of use as to the disposition of the cabinet, entrusting it only to safe hands, and for use in suitable cases after a discriminating diagnosis. The cabinet of KETCHUM and its method of use have been thus described by HOUGHTON:[2] "The cabinet is an air-tight chamber, in which the patient sits or reclines, breathing from the outside through a flexible tube. We exhaust a small portion of the air about him, causing a deep, easy and pleasant inhalation, filling every part of the lungs with the air or spray, producing a stronger and more regular circulation, bringing

[1] Bertin: Du Bain d'Air Comprimé.

[2] Pravaz: Emploi Medicale d'Air Comprimé. 1880.

[3] A. Simpson: Compressed Air as a Therapeutic Agent. 1857.

[4] Ein Apparat zur Künstlichen Respiration und dessen anwendung zu Heilzwecken. Wein, 1880.

[5] Berlin Klin. Wochenschrift, pp. 39, 40. Waldenburg-Hirschwald: Die Pneumatic Behandlung der Respirations und Circulations Krankheiten. Berlin, 1875.

[6] Ziemssen, vol. v., p. 400. New York, 1875.

[1] Quain's Dict., p. 18.

[2] Op cit.

the blood into complete relation with the oxygen of the air, and introducing the medication in every recess with ease. We have now simply aided the patient to take a deeper breath than he otherwise could. We can then either produce a compression of air about the body, compelling an evacuation of the lungs, and repeat the former movement, or we can continue the rarefied condition and let the patient expel the air by his own effort. In this latter way we produce the same effect upon the lungs that a dumb-bell does upon the muscles of the arm, for the effect is to exhale and not to inhale. We thus have such complete control over the movements of respiration that we can increase or diminish the force, frequency, and depth of each breath at our pleasure, and without the slightest effort or discomfort on the part of the patient." It should be clearly understood that the departure in atmospheric pressure for therapeutic purposes, both for condensed and rarefied air, is quite within the limits of safety, even for the most delicate structures of diseased organs.

It must be remembered that WALDENBURG'S methods propose but an increase of from $\frac{1}{50}$ to $\frac{1}{10}$ of an atmosphere for condensed air, and diminution of a fraction of an atmosphere for rarefied air. The KETCHUM cabinet possesses only a fall of $\frac{1}{10}$ to 1 inch of barometrical pressure, or a minimum rarefaction of $\frac{1}{300}$ and a maximum of $\frac{1}{30}$ of an atmosphere. The observations of DR. A. H. SMITH in the study of the Caisson Disease[1] demonstrated that, with an increase as great as fifteen to twenty pounds to the inch, no bad symptoms followed, either from the long emersion in condensed air of the caisson, or from the sudden transitions to and from the external air. Not until a pressure of forty or fifty pounds more super-added were the brain and cord engorged, or the possible introductions of nitrogen into the blood effected.

VIVENOT employed as high as $\frac{3}{4}$ of an atmosphere. FLINT[2] mentions beneficial treatment by one, and even as high as five atmospheres. BARTHOLOW favors a chamber with 1½ or two atmospheres. The phenomena following an initial inhalation of condensed air, as stated by BRUCE, are "pallor of skin and mucous membranes, sensation of pain in ears, diminished frequency of respiration, but the act becomes easier; enlargement of lungs, increase of vital capacity, as shown by the spirometer; depression of the cardiac force, and diminution in size and force of pulse, and rise of temperature." Frequent exposures to condensed air increase the bodily strength. These results are attained: first, by increased supply of oxygen; second, by increased pressure.

As to the beneficial influence on the heart, NIEMEYER may be cited. He says that inhalation of compressed air is "the most efficacious of all dietetic remedies, in the widest sense of the word."[3] The pulse, under the influence of compressed air, is reduced from 12 to 15 in the minute. ROSENTHAL[4] compares compressed air to digitalis in small doses, in its effect on the heart, and advises its use in mitral and aortic lesions. Not only does compressed air strengthen the circulation, but it equalizes the two circulations, increasing tension within the left ventricle, lessening tension in the right. Pressure is transferred from the venous to the arterial channels. Oxygen gives better blood, digestion is improved, and strength is the result.

Compressed air can be administered with uniformity of pressure, and for sittings of sufficient duration to be valuable, only by use of a cabinet. The compressed-air cabinets formerly constructed had necessitated the application of the same pressure on the exterior of the body, and on the interior of the air-passages.

The new cabinet reverses this order, by subjecting the periphery of the body to rarefied air, by admitting atmospheric air by a tube to the mouth and air-passages—a relatively dense air. It therefore fulfils all the requirements for the pneumatic treatment of phthisis, of local and diffused infiltration, collapse of vesicles, constrictions, and catarrhal tumefactions of bronchial mucous membranes.

It has been suggested that the KETCHUM cabinet is not adapted for the treatment of emphysema. The latter disease, it has been thought, demands: first, inspiration of positively condensed air, *i. e.*, a requisite amount of oxygen to aerate the blood within a lessened volume of inspired air; and second, expiration into a column or volume of rarefied air, producing a suction, or "pneumatic aspiration,"[1] of the residual air, and thus progressive collapse of dilated emphysematous vesicles and spaces.

Trial of the cabinet already has demonstrated its usefulness in many cases of emphysema. Its gymnastic exercise of pulmonary elastic tissue, as described by HOUGHTON, would warrant the expectation of its usefulness in this disease. One of the questions which this most valuable apparatus may help to solve is the superiority of pneumatic artificial methods above simple methodical chest-expansion. In the treatment of poorly-developed, weak chests, of pleuritic thickenings and adhesions, of bronchial warping and contraction, of chronic bronchial catarrh, and of the various stages and forms of early and late phthisis, systematic efforts at voluntary chest expansion are most efficacious. The ordinary increase of chest measurement in quiet breathing is but a half-inch to an inch. Yet by forced effort an increase of two or three inches can at once be secured. So, too, in normal quiet respirations twenty-six cubic inches of air are inspired, yet double, treble, nay, six or seven times that amount, may be drawn into the chest by forced breathing. Tubes are distended, air-sacs ordinarily inactive or feebly expanded are brought into fullest action, increased oxygenation is produced, blood is more fully vivified, and heart and circulation stimulated; strength results, and a general improvement of nutrition. Even with pronounced serum of the pleura, bronchi, or pulmonary parenchyma, this result can be attained. The phthisical chest, by means of systematic chest-expansion, especially after the method formulated and so long used by LEAMING, results, after a very brief time, in a progressive increase of circumference of chest, of two to three inches and more, and often a redevelopment of both normal vital capacity and full respiratory motion, with consequent health. If, added to such methodical expansion, treat-

[1] Effects of High Atmospheric Pressure, etc., 1876.
[2] Practice of Medicine, p. 69 Ed. 1881.
[3] P. 89, "Vol." Ed. N. Y., 1874.
[4] Ziemssen, vol. vi., p. 170.

[1] Chew Pebber, vol iii, Emphysema.

ment by inhalation of condensed air or medicated vapors be employed, in spray, as the balsams or other astringents are employed, still further curative results have followed. The mechanism of this natural method is in accord with the principles and purposes of the artificial method—the employment of cabinets and condensers. That the cabinet of MR. KETCHUM may prove even more efficacious where it can be made available, I am willing to believe.

Many other therapeutic problems may be solved by the KETCHUM cabinet. The withdrawal of peripheral pressure favors elimination by the skin; it also relieves venous engorgement and vascular tension in the kidneys and liver, and permits the depurative functions of those organs to be resumed—functions so often vitiated by interstitial deposit, induced by the obstructive changes in circulation within heart and lungs, or, in common with them, the product of a rheumatic or gouty bile.

PREVENTION OF HYDROPHOBIA BY PASTEUR'S METHOD.—The Sanitaire thus comments on PASTEUR'S latest discovery:

"The latest announcement of PASTEUR has thrown the public as well as the profession into a state of feverish excitement. The number of persons who die yearly of hydrophobia is comparatively insignificant, and except for the terrible form of the death would not attract much notice; but, as remarks LUCAS CHAMPIONNIERE, the discovery of PASTEUR may be considered as the first application of the rigorously scientific methods employed in veterinary medicine to human therapeutics, and therein lies its real importance. Without giving way, then, to prematurely extravagant enthusiasm over the success already accomplished, it is fairly permissible to hope that what has been done for rabies may be done for other diseases, whereof the prophylaxis, or the successful therapeutic treatment, would be of the greatest importance to the human race.

As on all other occasions when the distinguished scientist has announced any progress in his discoveries, the chorus of paltry objections has been raised, and envious tongues have endeavored to deprive him of honors he has never claimed, and to ignore what he has really done. It will be remembered that PASTEUR is a chemist, and that he experiments on purely scientific grounds. All must admit the persistence of the experimenter who, for the last five years, has pursued his investigations with a degree of patience unsurpassed, and a precision as unvarying as a mathematical problem, until his labors have been crowned with success. It is objected that he cannot cure hydrophobia! He has never claimed that it can be cured, because he has made no experiments on such cases; but from hundreds of experiments on animals he believes that the development of the disease can be prevented, even after the animal has been bitten by a rabid dog.

In December, 1884, a spontaneous cure took place in a dog after the first symptoms had been developed, and this dog remained protected against further inoculations. The virus when introduced into the medulla becomes equally distributed throughout the spinal marrow, so that every part of it becomes equally capable of reproducing the disease. If the specimen thus prepared be exposed to a dry air it gradually loses its strength, until it becomes perfectly innocuous. All specimens equally removed from the original inoculation, if of the same size and exposed to air equally dry, will have the same strength. That dried for 15 days is perfectly harmless when introduced into the human system. This is the strength with which PASTEUR usually begins. The next day he uses a stronger virus, until he introduces that exposed only one day, and which if used first would produce the most violent form of hydrophobia in seven days. This, when the gradation is observed, is perfectly harmless.

This first experiment was brought about by accident. A boy nine years old was bitten, in Strasburg, on the 4th of July last at 9:00 o'clock a. m., and fearfully mangled by a large dog. Twelve hours later, at 9:00 p. m., the large wounds were cauterized with phenic acid. On the 6th of July, 60 hours after the injury, the first injection was made in the presence of PROFESSORS VULPIAN and GRANCHER. Thirteen injections were made in ten days, and although six months will have elapsed on the 7th of January, 1886, he is, on the 21st of December, 1885, perfectly well. The inoculation of J. B. JUPILLE, the young shepherd of Jury, ended on the 1st of November, ultimo, and he returned to his home. His room was immediately taken by two children, ADEIEN MALFAIT and HELEN BAUJOIS, sent to Paris by the Mayor of the Commune to be treated by PASTEUR

PASTEUR, in his communication to the Academy, advanced three propositions: (1) The new method of employing the virus; (2) The application of the prepared virus to men; (3) The value of the method, and the conclusions to be drawn from the facts advanced.

The four objections of JULES GUERIN are substantially: (1) The disease produced by the virus used is an artificial one, and not true hydrophobia; (2) The inoculation thus performed will preserve the system only against rabies produced by the same means; (3) He objects that some of the wounds of the little boy from Strassburg were cauterized 12 hours after he was bitten; (4) The method does not pretend to cure hydrophobia. It should be remarked that JUPILLE was covered with his own blood and beslavered with the poison from the dog's mouth, and was not treated until six days after the injury.

It is not necessary here to pursue this subject. In view of subsequent events, it would seem that the opponents of PASTEUR have been hasty in their objections. It might be said that vaccine is not small-pox, and still further objected that every case vaccinated is not perfectly preserved against a mild form. Admitting that the experiments may fail in every particular, PASTEUR has claimed nothing; he has stated facts founded on experiment, and left the community and the profession to draw their conclusions. *Fiat justitia, ruat cœlum.*

FORCIBLE INJECTIONS IN INTESTINAL OBSTRUCTION.—In the American Journal of the Medical Sciences, for January, 1886, DR. H. ILLOWAY, of Cincinnati, reports four cases of intestinal obstruction treated by the forcible

injection of water, with three recoveries and one death. The injections were made with a powerful force-pump, and repeated two, three or more times, as necessary. The post-mortem examination in the fatal case showed that a knuckle of the ilium had passed through a slit in the omentum and bent upon itself, and the intestinal structures about the incarcerated portion were somewhat softened (death having taken place in a little more than a week after the symptoms set in).

DR. ILLOWAY concludes from these cases that:

1. Enemata are superior to every other method of treatment.

a. In the rapidity in which the cases are relieved.

b. And in clearly indicating whether a surgical operation will be required.

2. They are entirely safe and free from all danger, and in no way prejudice the case should a surgical operation become necessary.

It is due to DR. ILLOWAY to say that an operation was advised in the fatal case two days before death, and was refused. But for the length of time at which death ensued in this case, and the small amount of softening of the incarcerated portion of the intestine at this late date, we should be inclined to think that there may be an element of danger in forcible enemata in cases of some days' standing; namely, rupture of softened intestinal walls by the force of the injection and the pressure of the fluid. The fatal case must either be exceptional in regard to the degree of softening found, or we must think that the danger mentioned is comparatively slight until a longer time has elapsed. Of the two alternatives it must seem that the first should be held. It should be remembered, also, that the last injections were made on Tuesday, and then death took place on Friday; a sufficient time having elapsed for marked patnological alterations to take place. And it entirely possible that had the forcible injections been made on Friday or the day before, the intestinal wall might have been ruptured.

However this may be, DR. ILLOWAY shows very conclusively that forcible injections are of great utility in promptly relieving some cases at least of one of the most unsatisfactory conditions with which the physician or surgeon has to deal. In the three favorably-terminating cases the relief was permanent and almost immediate. In one of his cases an ordinary Davidson syringe had been tried without effect before the force-pump was used; from which it would seem that sufficient force cannot be obtained from an ordinary instrument. It is scarcely necessary to say that laparotomy should be performed if the force-pump proves ineffectual, with as little delay as possible. It will be remembered that in an editorial in the Journal of September 26, 1885, the treatment of intestinal obstruction was carefully discussed, and the following sentence quoted from the paper of MR. TREEVES, read before the British Medical Association, at Cardiff: After twelve hours of treatment of acute intussusception with opium or belladonna and rest, it will be expedient to attempt reduction by means of insufflation or forcible enemata. This should be done in the first twenty-four hours, if possible, in order that laparotomy may be performed early.—*Jour. Amer. Med. Ass'n.*

GERMAIN SEE ON ALIMENTATION.—The Paris correspondent of the Lancet says that PROFESSOR GERMAIN SEE, in opening his course of clinical lectures for the winter session, selected for his subject "Alimentation," or dietetics. He divided the subject into two parts—first, the dietetics of man in health; secondly, the dietetics of man in disease. The latter he would term "alimentary therapeutics." He began by defining an aliment as a substance containing the elements capable of repairing the waste of the tissues of the body, which is going on incessantly, as well as for the removal of the force and heat, which are also incessantly expended in the performance of the various functions of the organism. This led to the consideration of what the professor termed physiological diet, which consists of from 125 to 135 grms. of nitrogenous principles, obtainable from 250 to 300 grms. of muscle or of albuminates, from 84 to 100 grms. of fat, which is the combustible principle of the economy, plus 250 grms. of carbo-hydrates furnished by 300 to 400 grms. of farinaceous substances or of sugar, without counting water, which favors the organic changes, as well as the mineral elements which enter into the composition of all the liquids and tissues of the body; finally, oxygen, which is the burning principle, destined to revivify without cessation the corporal tissues. In anticipation of entering more fully into the composition of what should be the daily ration of the man in health, the professor would say, in general terms, that although green vegetables contain nothing nutritive, yet they have their utility, and must not be discarded, being a necessary element in the daily relations. Gelatin is another substance that has been greatly misrepresented because the rôle it plays in the process of nutrition has not been properly understood. MAGENDIE, and other physiologists of his time, after having experimented with it for ten years, came to the conclusion that gelatin was of no utility whatever in the economy—that is to say, as food. Other physiologists have since proved that gelatin, gelatinous bouillons, peptones, etc., contribute to the maintenance of the forces of the organism, in economizing the albuminoid principles, without its being itself transformed into fat. In developing the subject, M. SEE explained that gelatin may be looked upon as a substance that prevents or rather retards the process of denutrition, and on that account applied to it the term of "substance d'épergne," or, as GUBLER termed it, "antiderpidateur." It is, therefore, a useful addition to our diet, not only in health, but in disease; particularly in fevers. Where the process of denutrition goes on at a rapid pace, gelatin, in the form of beef-tea or other concentrated broths, would be invaluable. Any deviation from the above principles, whether in quality or in quantity, must more or less affect the normal functions of the different organs and thus produce disease, and M. SEE parenthetically stated that the Germans were large eaters and the English great consumers of meat, which may account for the greater prevalence of gouty affections among them. PROFESSOR SEE attaches the greatest importance to diet in a therapeutical as well as a hygienic point of view. In the treatment of disease it is sometimes even more important than pharmaceutical preparations, as, for instance, in typhoid fever, where a proper

selection of food is everything, while drugs serve only a secondary purpose.—*Med. and Surg. Reporter.*

THE EFFECTS OF COLD SALINE AND FRESH WATER BATHS ON FEVER.—The Lancet (Dec. 5th) says that the treatment of fevers by baths, of which a good deal has been heard during the last few years, is of course by no means novel, being mentioned by HIPPOCRATES, GALEN, CELSUS, and other classical writers. CURRIE, in 1787, obtained excellent results by treating "typhus" in this way, and several continental physicians shortly afterwards follpwed CURRIE'S example. Within the last five-and-twenty years, many careful observations have been made with the assistance of modern instruments of precision, as the clinical thermometer and the sphygmograph, on the effects of cold baths—that is to say, baths considerable below the temperature of the body—in cases of fever, and especially of typhoid, both of an ordinary kind, and where temperature was abnormally high; and papers on the subject have been published by BRAND, ZIEMSSEN, WILSON, FOX, BARTLES, JURGENSEN, HAGENBACH, LIEBERMEISTER, MOSLER, TRESKOFF, CHESNOKOFF, NIKOLSKI, KRUGENBERG, STOHR, RINGER, BRADBURY, and others. SENATOR added to the water of the bath, two pounds of potash and a half pound of soda, but did not, however, find that these materially improved the results. He then applied sinapisms before putting patients in the bath, and obtained better results. WINTERNITZ then tried the effect of rubbing the surface pretty energetically before the bath, and showed, by means of comparative experiments, that while after a simple bath the temperature of a patient was lowered to 0.2° C., after a bath of similar temperature and duration preceded by friction it was lowered 0.8° C. Last year DR. LISKUS, of St. Petersburg published the results of observations on thirty "parallel baths at 20° R. (87° F.)" with and without friction, showing that the temperature, both in the rectum and axilla, was more distinctly lowered and for a longer time where friction preceded the bath than where it was not employed. Quite recently DR. RABINOVICH has published the results of some very extensive investigations made in the Nicholaevesky Military Hospital on the comparative effects of salt and fresh water baths on the temperature, pulse, respiration, and muscular power of twenty-six typhoid fever patients to whom he gave 141 baths. He finds that saline baths have more effect in lowering the temperature than fresh water ones, the average difference being rather more than a tenth. It is especially great during the first half hour after the bath, but is perceptible for fully three hours. Evening baths, both saline and fresh, produced a greater reduction than those given in the morning. Saline baths produced a more marked effect on both pulse and temperature than fresh water ones. The augmentation of the muscular force as tested by the dynamometer was also greater with the former class of baths.—*Medical and Surgical Reporter.*

INTRA-PARENCHYMATOUS INJECTIONS OF IODIDE OF SODIUM IN PNEUMONIA.—The treatment of inflammation of the lung by the injection of remedies into the substance, has been attempted by LÉPINE, of Lyons, who reported some months ago a rapid improvement, both local and general, under this method. He employed at first a solution of the bichloride of mercury, 1 to 40,000, of which 20 or 25 cubic centimeters were injected, with the immediate effect of a diminution or disappearance of the râles and blowing breathing, and within 24 hours a reduction of the temperature with improvement in the general symptoms. Resolution set in a few days after the defervescence, and convalescence was rapid.

In the Revue de Médecine of December 10, he reports a case which was treated by injection of the iodide of sodium, 25 c.c. of a solution of 1 to 25. The patient, a man aged 60, in a bad condition of health, had a chill on the evening of the 11th, and on the 13th was brought to the hospital with signs of inflammation of the left base. On the 14th, 50 hours after the chill, injections of the solution were made at three different points below the angle of the scapula. Very slight improvement followed, and on the morning of the 15th two other injections were made of 30 c.c. each. Defervescence took place in the night, within four days from the onset of the disease, and by the eighth day resolution had set in No other treatment was employed except in the early stages. When the disease is advancing, we should regard this method as of very doubtful value. It is quite possible that the extension of the process might be limited by the injections, but when hepatization has been established in an entire lobe, it is very unlikely that such a small quantity as 25 c.c , when injected in several places, could have much influence upon the process. Indeed, in the report of the cases referred to, it is stated that resolution did not set in for several days after the subsidence of the symptoms, and the improvement may, perhaps, be attributed to the general effect of the drug, and not to its local action upon the lung.—*Medical News.*

THE ABUSE OF A USEFUL REMEDY.—The following timely remarks by the College and Clinical Record, must reflect the opinions of all thoughtful physicians:

It would be an old tale retold, to relate, at this advanced period, any of the evil effects which often follow in the train of drugs misapplied and misappropriated in self-indulgence. The abuse of morphine, chloral and other valuable remedies is now as well known to the public at large as to the medical profession itself. A recent story has been going the rounds of the daily press, of a Western physician, whose mental and physical health was hopelessly wrecked, and whose wife and children were brought to destitution, by his experimental investigations upon them to test the constitutional action of cocaine. It is probable enough that with the bright pictures which we have had offered to us for a year past, in medical journals, of the wonderful effects of cocaine when locally applied, will be occasionally mingled the shading of its poisonous effects when carelessly or recklessly administered.

It has, indeed, been shown conclusively, in the pages of this journal, that a cocaine habit may be formed, which will inevitably crush the spirits and destroy the mental balance of its

unhappy victim. It is unfortunate, however, that when such items as the one referred to find a place in the columns of the public newspapers, a dread of the employment of cocaine may be engendered in the popular mind, coupled with a distrust of its efficacy, even when judiciously employed. Although it is already firmly established in its practical application as a valuable remedy, the public will, for some time, believe that its use is still experimental, forgetting that the most familiar and valuable remedies we have within our tangible service may be similarly abused, when drunkards, fools or fanatics take them too closely into their companionship and confidence.

ARTIFICIAL ALIMENTATION IN CASES OF VOMITING OF PREGNANCY.—In a letter to the N. Y. Med. Record, DR. H. B. MILLARD encourages the employment of artificial alimentation in the severe vomiting of pregnancy. He says: "I was much gratified to see in the Record of December 12th, an account of a cure by BRUNNICHE—by the introduction in the œsophageal tube of liquid food, as milk, powdered beef, etc.—of a pregnant woman suffering from uncontrollable vomiting. Except this case, reported this year, I have never known of any case of this sort successfully treated by the œsophageal sound (*gavage*) but one reported by myself in a series of articles on superalimentation, artificial alimentation, etc., published in the N. Y. Med. Journal, April 19th and 26th, and May 10, 1884. This was a case so desperate that the patient would have died from inanition without the treatment employed, unless, indeed, premature labor had been induced. These cases possess all the more interest, because DR. DEBOVE, whose experience in artificial alimentation has been very extensive—much greater probably than that of any other physician—and who by his sound has contributed greatly to the practicability, informed me, in the summer of 1884, that he had not found it of use in the inanition of pregnancy resulting from vomiting, although he had, as his published cases show, used it with great success in hysterical anorexia and vomiting.

According to DEBOVE, there is no relation between the appetite of patients and their digestive faculties. The food introduced into the stomach may be tolerated and digested, no matter how sensitive the pharynx may be. The substances employed by me in the cases referred to were the powder of beef, the yolk of eggs, and milk.

If carefully employed, I believe alimentation with DEBOVE'S stomach-tube will be found efficacious in some cases of pregnancy where all other means fail."

THE CURE OF ASTHMA BY PAINTING COURSE OF PNEUMOGASTRIC NERVE WITH IODINE.—I understand by the term asthma, the condition of spasm of the bronchial tubes of both lungs, with hyperæmia approaching or amounting to inflammation, accompanied by râles upon both inspiration and expiration, with great difficulty of breathing, and the term is applied to the paroxysm alone, which returns at regular or irregular periods. Disturbance of function or disease of structure of the pneumogastric nerve is always present.

To cure the paroxysms I originated a method of treatment nearly five years ago; and repeated observation has confirmed its great utility. When called to a case of asthma, with a camel's-hair brush I made a streak of CHURCHILL'S iodine over each pneumogastric nerve in its course in the neck, from the upper part of the thyroid cartilage to the upper borders of the clavicles. By counter-irritation thus applied, the capricious and abnormal exercise of nerve-force by the pulmonary filaments is controlled, the bronchial spasms promptly relinquished. Such is my original method—simple, certain, quick. CHURCHILL'S tincture is the best counter-irritant, because, first, it is convenient; second, its action is easily controlled; third, it does the work. To permanently cure the paroxysms, it is usually necessary to remove the underlying morbid condition upon which they depend or are associated.—RICHARD B. FAULKNER, in the *Med. Record.*

A MODE OF TREATING ACUTE INFLAMMATION OF THE KNEE-JOINT.—MR. RICHARD BARWELL (Lancet) advocates the treatment of acute inflammation of the knee joint by aspirating of the joint in the following way: The knee is firmly enveloped, by preference, with a sufficiently broad band of elastic webbing; or an ordinary calico bandage will answer the purpose, care being taken to leave between two of the turns a little interval on the inner side on a level with the upper margin of the patella. At this point a tubular needle is passed into the joint. The fluid runs away, as a rule, quite easily, and often better, without the aspirator vacuum. While it flows, the hand should exercise a little pressure on the patella, effectually preventing the entrance of air, and when, the flow having ceased, the needle is withdrawn, the puncture is to be covered with sticking-plaster. Pressure by means of adhesive-plaster must then be applied, and the limb placed at rest for a few days upon a splint. In traumatic cases the fluid is deeply stained with blood; in non-traumatic cases, if the evacuation is effected early the liquid is quite clear. By this procedure the pain is immediately relieved, the temperature, if it has been high, subsides, and the patient is well in from ten days to a fortnight.—*N. Y. Med. Journal.*

SALICYLATE OF LITHIA IN RHEUMATISM.—M. VULPIAN has presented, before the Académie de Médecine, the following summary of the result of his researches upon the use of lithia in rheumatism:

In acute articular rheumatism and in acute attacks of gout, the salicylate of lithia appears to be as efficacious as the similar sodium salt. The lithia salt is occasionally useful in dissipating the still slightly painful joints left after treatment with the sodium salt.

The forms of acute rheumatism in which the fibrous tissue is especially attacked, respond more readily to the lithia salt, which is also the more effective in subacute progressive articular rheumatism. By the use of the salt last named there has been obtained a noteworthy abatement of the symptoms of chronic articular rheumatism.

The maximum efficient dose of salicylate of lithia is seventy-five grains daily, while sixty grains daily are generally sufficient. Its usual physiological effects are, more or less pronounced headache, vertigo, and considerable deafness, but the buzzing and whistling and other subjective disturbances of hearing, so common after the use of the salicylate of soda, are here comparatively rare.—*L'Union Médicale*, Dec. 10, 1885

The Inflammation-Provoking Properties of Jequirity.—Messrs. Bruylants and Vennemann, like Messrs. Warden and Waddell, claim to have demonstrated that the inflammation-provoking properties of jequirity are not due to any microbe, and attribute them to a soluble immediate principle, isolated and called by them "jequiritin," which they believe to have been formed during the germination of the jequirity seed, like diastase in the malting of barley. Messrs Dechamp and Dujardin, who supposed this to be a mixture, have isolated a new substance from it to which they have given the name of jequiritzymase. As zymases are generally the products of microzymes, they were led to experiments by which they have ascertained that the microzymes isolated from the seeds possess the inflammation-exciting properties of jequiritzymase, and, like it, are capable of liquefying starch; also that they can pass into the bacterial form, the bacteria being still capable of producing the same symptoms, but that when the bacteria are allowed to develop in a filtrated solution of jequirity or a solution of jequiritzymase in contact with air, these preparations lose their activity.—*Druggists Circular.*

Corrosive Sublimate in Conjunctivitis.—Below has placed on record 65 cases of conjunctivitis (26 simple, 19 pustulous, 2 diphtheritic, 2 gonorrhœal, and 16 granular), in which solutions of bichloride of mercury (1:200) were used. From the results of these observations, Below draws the following conclusions:

1. Under this treatment, the diminution of the secretion, both in chronic and acute conjunctivitis, and the decrease of the hyperæmia, are more rapid than in the similar use of nitrate of silver.

2. Simple phylctænula, thus treated, disappears as rapidly as under the use of calomel.

3. The use of a weak solution of bichloride of mercury in spray yields good results as a prophylactic of gonorrhœal conjunctivitis in the newborn.

The sponging is practiced two to eight times daily, and the inner surface of each lid is separately subjected to the action of the solution. —*L'Union Medicale*, Dec. 12, 1885.

Antipyrine in Epistaxis.—We have before alluded to the hæmostatic properties of antipyrine. Dr. Lavrand, in the Jn'l de Medecine et de Chirurgie Pratiques, confirms other observers. It is certain and prompt in its effects, he says, and is much superior to perchloride of iron, as it is colorless and does not coagulate the tissues like the latter substance. It is used in aqueous solution, of the strength of 1 to 30, applied on lint and inserted as far as possible into the nares. The nostril is then compressed with the fingers so that the tampon soaked in the hæmostatic is in contact with a large extent of the mucous surface. By means of several applications thus made, M. Lavrand succeeded in arresting epistaxis which had persisted in spite of plugging of the anterior and posterior nares.

Alveloz as a Remedy for Specific Ulcers.—Nearly a year ago our Washington correspondent informed our readers of some interesting and promising trials that had been made by several of the medical officers of the Marine Hospital Service of the new Brazilian remedy for cancer, alveloz. A Brazilian physician, Dr. Clements Ferreira, now writes a letter to M. Dujardin-Beaumetz (Bulletin général de thérapeutique, December 15, 1885), in which he gives brief notes of two cases of epitheliomatous ulceration that were promptly cured by the application of the milky juice of this euphorbiaceous plant, the "lait d'alveloz." —*N. Y. Med. Jour.*

Cocaine in Infantile Coryza.—As is well known, the coryza of nursing infants may, by preventing suckling, prove a very serious affection. It can be cured, however, according to Semtchenko (Gaz. Med. De Paris, June 6,1885), by the introduction into the nasal cavity, six times daily,of two drops of a two-per-cent. solution of the hydrochlorate of cocaine. According to the author, children which previousty have obstinately refused to nurse will commence to suckle a few minutes after the first application of the cocaine, and the coryza is ordinarily cured after about four days of this treatment.

Still Another Cure for Cancer.—In a case of alleged epithelioma involving the facial bones, with extensive infiltration of the tissues, where an operation was not deemed desirable, Dr. Antoni, of Mazzara del Vallo Maggio, applied an ointment consisting of 15 parts of resorcin to 20 parts of vaseline twice a day, with the result, it is said, of completely curing the disease; nothing remaining but a white scar a centimetre in diameter.—*Brit. Med. Jour.*

Morrhuol, the Supposed Active Principle of Cod-liver Oil.—By the evaporation of an alcoholic extract of cod-liver oil, Chapoteaut has produced a substance for which are claimed all the active virtues of the original oil, the bulk of which is but one-twenty-fifth that of the latter.—*L'Union Medicale*, Dec. 5, 1885.

Alkaloid of Pomegranates.—A crystalline body has been obtained in minute quantities from the rind of pomegranates, which, when placed upon the tongue or other portions of the mucous membrane, appears to cause a paralysis of local sensation after the manner of cocaine.—*American Druggist*, Dec., 1885.

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Original Articles.

CLINICAL LECTURE.

BY DR. THEOPHILUS PARVIN, OF PHILADELPHIA.

NYMPHOMANIA AND MASTURBATION.

I had intended, gentlemen, to bring before you a woman who is suffering from an unusual and exceedingly distressing complaint, and one that you will seldom hear discussed, while, at the same time, it is of the utmost importance that you should be enlightened on the subject for it is a matter upon which will frequently rest the happiness not only of the individual herself, but of her family, friends, and all who may be in any way connected with her. But the woman has disappointed us; yet, as the subject is so important and so rarely touched upon, I will devote a short time to the discussion of the subjects of nymphomania and masturbation.

The woman whom I had hoped to bring before you is a widow, forty-two years old, whose menstruation ceased three years ago. She was first married at seventeen, her husband subsequently died and she married a second time. After a while this second husband wearied of her, sexual intercourse ceased and they finally separated. For two years she has been practically a widow,—borrowing a simile from the verdant maiden, she is a *grass* widow. She comes to us complaning of nymphomania. She has an excessive desire for sexual intercourse; she deviously seeks the company of men, who possess a well-nigh irresistible fascination for her; but she does not consent to intercourse on all occasions. As she expresses it, she is *mad* after men and when the act has been consummated she is equally *mad* at them; all sense of propriety is not yet submerged in this mad passion, and by the effort of principle she is frequently enabled to control her terrible and debasing proclivities. After sleepless nights of intense excitement caused by the non-gratification of her terrific passions, she rushes frenzied into the streets to seek relief in diversion, but this demon of lust haunts her footsteps, and finally, in despair, she seeks relief in masturbation. Here, then, in this poor woman we have the dual condition of nymphomania and masturbation, each terrible in itself, but, together, forming a combination well calculated to wreck a woman's life.

The sexual sense, the centre for sexual excitement, lies somewhere in the spinal cord, for if a man fractures his cervical vertebræ, or sometimes, the dorsal or lumbar, he is apt to have erections and seminal emissions, and the same condition has been noted in men who have been hung; but in such cases there is no sensation of pleasure associated with the erection or emission, and no sexual desire, for I could not for one moment entertain the idea that a poor, wretched, condemned criminal, standing on the scaffold with a rope drawn tightly around his neck, on the verge of an awful fate that is about to launch him into an eternity unknown and uncertain, could have the most instantaneous flash of sexual desire.

So, therefore, we cannot consider the genital sense alone (which in the rabbit has been located about the fifth lumbar vertebra) as an explanation of the disease we are discussing. We must look elsewhere, and, I think, must consider the brain. This woman tells us that as a child she learned all about the sexual act, and in this fact we see the sowing of the seed that has produced such a black and dismal harvest. If there is any one thing more important than another in the care of boys and girls it is to keep their minds pure. In this case, as in many others, the sexual organs themselves are not to blame, but the terrible affliction is due to some impure thought in childhood, suggested, maybe, by some casual occurrence that has caused day-dreams and musings, continual or frequent reflection, until the mind in its relation to this sexual passion has become disordered. By the time this woman was married, at seventeen (which was too young), she had, so to speak, her sexual thoughts well developed, and she was in the habit of having sexual intercourse five or six times a week, supposing, as she says, that she was just like other women. But, gentlemen, she was not like other women; in the name of woman, I protest that she is unlike other women. From this case we learn another lesson. I have told you that her second husband wearied of her and left her, and for some time before the separation he ceased to have connection with her. Here is the result of a secret law, as a woman invites a man, so he wearies of her caresses; that which we obtain in this world only by persistent effort, we value more highly; that

which is easy of procurement, we soon tire of. This woman might be leading a happy married life to-day but for this inordinate passion, constantly clamoring for satisfaction, until the husband wearied of her importunities.

If you read women as I do, and as does MR. ACTON (whose great work on the "Reproductive Organs," I think, should be in the hands of every physician), you will agree with me that it is not natural for women to have a desire for sexual intercourse; it is submitted to as a duty. This exceedingly latent sense may be corrupted as I have said, by some occurrence in childhood, till the immoral thought grows by brooding and ultimately becomes so vast as to swallow up the whole being as it has done here, but of course it is rare for such to be the case. I would say to those who have charge of boys or girls, "*don't unchain the tiger;*" have a care, do not sow the fatal seed. It is unfortunate when a young boy or girl learns about the sexual act and doubly so if learned from some rude and rough companion. Just at the close of the menstrual period, the woman may have some slight desire, but, as a rule, the majority of virtuous women submit merely to gratify the husband's desire. You will have through life nobler, better and happier experiences, if you carry this idea with you: hence I wish to emphasize it. Unfortunately, the *pretended* sexual rhapsodies of the professional prostitute, of the woman who sells her body for gain, are taken as the type of a virtuous woman. In the male the gratification from the act is confined to one organ and most likely to but a small part of this organ, while in the woman the sense of satisfaction is extended to a much greater surface, not only the clitoris, but the whole vagina participating.

Let me here utter a word of caution: "let him that standeth, take heed lest he fall.' More than one promising young career has been wrecked by the claims of depraved women that they have had intercourse with them while under the influence of chloroform. Let me, therefore, impress upon you never to examine such a woman save in the presence of a third party. When I subjected this woman to an examination (in the presence of DR. MORRIS) I found some peculiar phenomena. When the finger was introduced into the vagina, as soon as the clitoris was barely touched, there were produced irregular movements of the hips and pelvis. As the finger was advanced the muscles about the vagina were thrown into a state of contraction, which closed it tight on the finger, and this caused a sense of gratification to the woman.

In nymphomaniacs, we generally find a coarse skin, large lips, black eyes, black hair, dark complexion and a more or less rigid, contracted and prominent condition of the muscles; there is usually less fat and connective tissue, so that on the whole the body is more angular and less rounded than in the perfect woman. But there are no absolute physical signs of a nymphomaniac. The evil though, referred to, may grow in the blonde, and the passion become so imperious as to master the whole woman.

There are three stages of nymphomania: the first where the woman has complete control over her erratic desires, and retires to loneliness to dream over her passions; the second, where she seeks the men, and by lascivious looks and gestures, maybe by a partly uncovered person, give evidence of her terrible infirmity; in the third degree, the woman becomes truly a maniac and gratifies her desires, as some older writers tell us, by seeking connection with men and even with dogs. In some cases this condition is caused by local irritation, as by vaginitis, or some uterine or ovarian disease may be the exciting cause. But in very many cases there is no local trouble. Ungratified sexual desire, as you can readily understand, may cause it, as might have been the case here had this woman's desire to copulate several times a week not been satisfied. A case is related of a nymphomaniac under the care of a distinguished Parisian alienist, who was placed in an asylum. On one occasion, when the parents were visiting her, the doctor happened to say in their presence, that marriage would have a good influence on her condition. Shortly after she escaped from the asylum, and one evening the doctor met her on the streets of Paris, a common prostitute, when she told him, with pleasure, that she had cured herself. There are other cases where excessive indulgence or onanism has caused it, so that we cannot recommend the same treatment for all cases, as it would hardly do to advise a woman whose disease was due to excessive indulgence to try matrimony as a remedy; this would be homœopathic, but it would hardly be calculated to cure the disease. The question of removing the ovaries is to be considered, and we must ask the question whether we can thereby cure the disease. This operation is becoming so extremely fashionable that I imagine that after a time but a small proportion of our women will be child-bearing. I would say that in some cases this operation migh relieve the inordinate desire, but it is an operation of mutilation that must be well considered before it is undertaken; it is easy enough to remove the ovaries, but once gone they can never be restored. In this case the operation is not at all indicated, for the woman has passed the menopause; her ovaries are slumbering, in fact they are permanently asleep, in addition to which we have had no history of ovarian derangement, therefore I would not advise the operation. Remember also that I only say the operation *might* do good, for I consider it very doubtful. Clitoridectomy might do good in some cases; it

has relieved cases of confirmed masturbation, and I would say that when all other means have failed we would be justified in resorting to it. Alas! alas! the world grows old, but there is no novelty of iniquity in the sexual gratification; the same means that were in vogue in bygone centuries and now prevalent in China, are also to be observed among the children of civilization of to-day. Onanism is an ancient sin; to students of the Bible the "sin of Onan" is familiar. The practice of masturbation is not confined to mankind, it belongs to dogs, monkeys, stags, elephants and bears. When the stag is unable to gratify his passion in the natural way he rubs his belly against a tree and thus produces an emission. So that this debasing sin is not confined to this age nor to the human race. The practice is much more frequent among males, some writers going so far as to assert that the majority of boys masturbate once or oftener during boyhood; my own observation has satisfied me that it is very rare among females. Among women we may have lingual or sapphic onanism, the one where the tongue, the other where only the mouth is applied to the sexual parts to perform the act. It will sometimes happen that women procure young animals to satisfy their desire; a young puppy will be used to provoke an emission from the vulvo-vaginal glands. The finger, a candle or wax instrument is also used. There is such a thing as clitoridian onanism, where one woman with an exceedingly enlarged clitoris, will use this organ on a fellow-being. The great question arises, how are we to make men and women purer? It is sadly true that the study of the classics is calculated to breed and foster immortality. VIRGIL, in immortally beautiful language, really makes arguments in favor of onanism and pederasty. If for no other reason, for this alone, I would favor the banishment of the classics from college courses, for they have a tendency to sow that terrible seed about which I have spoken. Remember that one cannot touch pitch without being defiled. We must begin at the foundation and keep the minds of our boys and girls pure; no matter how they learn these "forbidden fruits," whether from classic poetry or from some rude companion, their immature minds conjure up wrong ideas, and a terrible harvest may be confidently looked for when the secrets of sexual life are made known at an early age.

This poor woman might have been happy if she had not prematurely learned these secrets. When a woman reaches the stage of mania she is a fit subject for an asylum; this case has not yet progressed that far, for, with her, *principle* is, as yet, the rock in the sea of life; the waves of her passionate desire dash with fury against this rock, but so far it has stood firm. We must endeavor to keep those who have not yet reached this final stage, by appeals to and influence over their minds. There is a power within us that is not that of the arm or the heart, that is far greater than any other power, and which we call the mind. This we must strive to fill with noble thoughts. Novels, sensational theatrical exhibitions, and lascivious images should be avoided. As a rule, the society of men should be shunned; men, who are honest, are fairly decent creatures, but they are sources of evil to women thus affected. Such a woman should be sent to the country; she should work, plow the fields, if necessary, so as to have the mind so occupied by exercise in the open air as to leave no room for these morbid thoughts. If we can find any local disease, it should be treated. When, in this case, we noted the irritability on the introduction of the finger, already alluded to, we applied muriate of cocaine to the clitoris, and I can assure you the effect was wonderful, the vagina at once behaved as well as the most virtuous vagina in the United States. We also ordered suppositories of cocaine once or twice daily. From these remedies we can hope for some relief, but we can never expect to cure save by influencing the mind, as has been already indicated.

Physicians do not sufficiently realize how much power in this respect they have. Remember that Our Saviour was touched by the woman who was sick and the "virtue went out of him;" he knew that he was touched, so will you, too, feel that a virtue has gone out of you, when, by your ministrations, you have lifted a poor, fallen woman from the depths of despondency and restored her once more to that position she was originally destined to adorn in society. In this way can you do the most good; moral suasion will be far more efficacious than drugs. You may tie the arms of a nymphomaniac and she will masturbate by wriggling motions of her legs and thighs; you may tie her arms and legs and she will accomplish her purpose by rubbing her body against the bead or the bureau, or some other article of furniture; nothing less than death will control this all-devouring passion unless you can impress the mind. Talk about removing the ovaries and clitoris! why, it reminds me of the story of the man who was going to cut off the dog's tail to prevent him from going mad, when some one said that it would be necessary to cut it off *close behind his ears.*

If you cannot rouse the slumbering reason, if you cannot awaken the deadened conscience, all your efforts will be futile, as there are but few cases that will be benefitted by operative procedures.

Boston paper: MRS. A.: "I hear that the MONTMACKINGTONS are going to spend the winter in Paris." MRS. B.: "Indeed? You surprise me! When were they bitten?"

EPILEPSY A REFLEX SYMPTOM.

BY G. A. HARMAN, M. D., LANCASTER, OHIO.

I wish to call attention to some points in epilepsy which have been hinted at now and then, but have not received the attention they deserve. I refer more particularly to its reflex character.

That the affection is usually incurable is too well known by the profession and public. But why? Probably because we do not know its cause—its pathology. The brain has been examined time and again, slice by slice, under the microscope in vain. This brings us to the question: Does its cause, or lesion, necessarily lie in the brain? I do not believe that it does, but rather that the paroxysm is reflex, even when there is a depression of the skull to account for it. The part depressed is always over the cerebrum, the irritation of which is communicated to the cerebellum, and we have epilepsy as a reflex.

That intestinal worms do sometimes produce epilepsy in children, is an admitted fact. I had a case of a young lady, æt. 15 years, who had several paroxysms. Inquiry showed that her menses were irregular as to time and quantity. The normal condition being established by appropriate treatment, the epilepsy ceased. A young lady in this neighborhood, who had been an epileptic for years, while burning brush fell in a fit with one hand in the fire; it was burned badly. She never had another paroxysm.

Somewhere in the past I learned of a man, a confirmed epileptic, who accidentally cut off one of his toes, and never had an attack afterwards.

Do not these cases prove that epilepsy may have its point of origin in any part of the body? Evidently, in one case it resided in the intestines; in the hand in another; and in the last in a toe. In the former two the causes were removed by remedies; in the latter two destroyed by accidents.

We know that tetanus is a reflex disease, or at least the point of origin may be in a distant, and unimportant part. It seems to me that tetanus and epilepsy are closely allied, but differ widely, as we know, in gravity. If the greater disease can be produced by a distant cause, why not the less? I believe it is. The point of origin may be a cicatrix, a contraction, an adhesion, or a foreign body in any part; lumbricoides, ascarides, a deranged uterus, a depressed skull, or what not, the irritation from which is conveyed to the cerebellum, and from thence reflected to all parts of the body in the form of an epileptic paroxysm. When the profession ceases to look to the brain for the sole cause of epilepsy, and appreciates what I believe to be a fact—that any portion of the body may be the point of irritation from which the epilepsy proceeds—they will have arrived at a truer pathology, and will treat this dreadful disease more successfully.

RHUS AROMATICA AS A HÆMOSTATIC.

WM. B. HARRISON, M.D., COLUMBIA, TENN.

Mrs. A. R., bricklayer's wife, aged 47, approaching the change of life, applied for treatment. There was severe hemorrhage. I treated the case for some time, using all the ordinary means, local, such as the tampon, sugar of lead, etc., and also internal, having given amongst other remedies large doses of ergot of different reliable brands. The treatment had little or no effect, the case only getting better as the menses naturally disappeared for the time being, and in the course of one or two months the same thing would be gone through with again. In the meantime a bottle of fl. ext. rhus aromatica (P., D. & Co.) was left as a sample and I determined to give it a trial. I gave it in about 10-drop doses repeated about every three or four hours, and before the patient had taken four doses she was much better and very shortly the hemorrhage stopped entirely. This happened over a year ago, and the lady is now alive and well. She was troubled subsequently to some extent each month for several times, but not so severe as before, and the same remedy helped the case after taking two or three doses each time. She now keeps a bottle of it in the house and would not be without it on any account.

Mrs. B. M., carpenter's wife, delicate, approaching the change of life. Sent for me, complaining the same as the above case. I went through the same plan of treatment, such as giving ergot, etc., with better result than in the previous case, but still the hemorrhage was such every month as to badly exhaust the patient. I then resorted to rhus aromatica in the same doses as in the previous case and with the most happy results. The hemorrhage came under control much more readily and effectually than it had done under the usual line of treatment.

I have reported my experience to other medical men in the neighborhood and the result of their experiments have resulted very similar to mine. I also know of cases in which other physicians have used the drug in from five to ten-drop doses in cases of hemorrhage from the kidneys and with very good results.

RECENT ADVANCES IN SURGERY.

BY C. E. NELSON, NEW YORK.

In the New York journals of Jan. 23, are accounts of two remarkable classes of operations, the first embracing laparotomy, for removal of stones in different organs. The

operator was DR. LANGE, who incised gall-bladder, kidney (on one and both sides), and duodenum for stone in different cases. As regards the life of the patient, success was not uniform; but the advanced condition of disease and stony deposit, and the rare skill evinced in operating, afford strong hopes that a brilliant future awaits kindred operative procedures. All of DR. LANGE'S cases deserve attentive perusal. Nephrotomy and nephrectomy were also performed for pyonephrosis. It would be worth while to go over these cases categorically, but space will not permit; therefore we refer our readers to N. Y. Medical Journal of the 23d. ult. The gall-bladder and duodenum were of course sewn up by a double line of sutures.

It is to be presumed that incising and cutting out are only available in cases of renal calculi and abscess. Diseased kidney, granular, tubercular, cystic, or changed by degeneration or deposit, would presumably be found on both sides, if not simultaneously in different degree; in sequence, after an interval of time.

The fact of many organs being in duplicate, permits operations, which should be eagerly tried in proper cases.

The second operation I refer to, will be found described in N. Y. Record, Jan. 23. In cases of hopeless deafness the drum was incised in several places, and at repeated intervals, instead of the ordinary punctures; hearing returned. This operation was thought of and performed by DR. W. H. BATES, who deserves a great deal of credit.

In DR. BATES' operation, the result is to leave a number of cicatrices, which, contracting, produce tension, by which the membrane is drawn out. The membrane frees itself from adhesions in this manner, and in many cases loosens the anchylosed ossicles. A delicate hearing-test proposed by DR. BATES, is snapping of finger-nails.

These two classes of operations, reported in the same week, reflect most favorably upon our operators.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

STATED MEETING, Jan. 18, 1886.

President *pro tem* D. W. GRAHAM, M. D., in the chair.

DR. E. J. DOERING read a paper entitled

MUTUAL PROTECTION AGAINST BLACKMAIL.

The author stated that among the many trials which physicians have to encounter in their profession, is the ever-existing liability of being blackmailed. This may either assume the more frequent form of a so-called malpractice suit, or the relatively less frequent charge of a criminal assault, according to the viciousness of the complainant. Such suits against physicians are increasing. One reason quoted was the fact that every city is overrun with petty lawyers who have little or nothing to do, and are always willing to encourage any suit whatever, if there be the least prospect of getting something out of the defendant. The author stated that since investigating the matter he became convinced that many of these blackmail schemes were settled before being made public. Many a physician preferred being robbed of one or two hundred dollars, rather than incur the publicity, the loss of time, and the endless expense of a lawsuit. Again, the average jury, composed of the ignorant and illiterate, will always have a strong leaning toward the complainant and against the defendant in a malpractice suit, as physicians are popularly supposed to be capitalists. The author stated that, personally, he had never been sued or even threatened with a suit, and it was, therefore, from no selfish interest, but from a sincere regard for the welfare of the profession, that he advocated the formation of an association for the mutual protection of physicians against blackmailing suits of all kinds. His plan is to organize a society composed of two or three hundred members of the regular profession, all of whom shall be of acknowledged ability, possessing a good and moral character and standing in the community. Said association to employ the best legal talent attainable, by the year, to furnish the members such legal advice as they may desire at any time, and defend any suit against the members arising in the discharge of their professional duties. It was stated that the expense of each member of an association composed af about two hundred, would not exceed five dollars per annum, and that an initiation fee of five dollars would create a sufficient fund for court expenses. Such an association would be a power in preventing suits. Let it be known that the individual physician is backed by the financial and moral support of a few hundred of the best physicians, and aided by the best legal talent obtainable, and he will be let severely alone by the offscouring and dregs of society who constitute, almost without exception, the blackmailing element in our professional life. The author stated that he was not aware of the existence of such an association as the one proposed in any other city, but the principle at least had been carried out recently by the New York County Medical Society, in voting $500 to assist in the defense of the DRS. PURDY, members of the society, in the case of BROWN *vs.* PURDY. After reading a number of letters from prominent physicians in favor of forming a protective association, and presenting several legal opinions sustaining the advisability, practicability and legal status of such a

society, the author concluded by stating his firm belief that such an association for mutual protection was needed, that it would be a power for good, that it would draw the profession closer together, that, in short, it would be based on the principles of a common brotherhood, viz.: Equality, harmony, justice and unity.

DR. F. C. HOTZ said that the extract of his letter to DR. DOERING, which was incorporated in the paper, indicated that at the time it was written he did not think favorably of the project. And, after listening with much interest to the doctor's arguments, he saw no reason for changing his opinion. Professional reputation and honor is the most personal of all personal property; if he lost it, it does not hurt anybody but himself, and, therefore, if an attack be made on it, he should certainly wish to employ among the able lawyers the one in whose ability he had the greatest confidence. But he was not sure whether the lawyer retained by this protective union would be the one to whom he should like to trust the defense of his reputation. The attorney might be as able, or abler, than the lawyer of his own choice; but should the case go against him, he should never feel satisfied that the lawyer had done all that could be done for him unless he had full confidence in him. It is with the lawyer as with the physician, a question of confidence, and his patrons find no fault with his treatment as long as they have implicit faith in his ability.

An objection of greater weight, however, has been urged by several of the doctor's correspondents in asking what possible effect it might have if the fact was brought out in court that the defendant belonged to such a union? The lawyers whose opinions were obtained and read by the doctor say it cannot legally affect the case. There is no doubt but what this is true. But the verdict of a jury in malpractice suits is not determined by the legal aspect of the case; and circumstances which cannot have any legal effect upon the case have often made a deep impression upon a jury and decided the case against the physician. To illustrate: In DR. BETTMAN'S first trial the experts of the prosecution testified so unreservedly in the doctor's favor that had the case been then submitted to the jury without arguments, the doctor would have been acquitted at once. To fortify his cause DR. BETTMAN'S lawyer called a number of experts whose testimony was of course only cumulative. Now what did the prosecuting lawyer do? Did he make an effort to break down the expert evidence by scientific arguments? No, sir; he wiped out its effect upon the jury by the mere waving of his hand, speaking thus: "The defense has piled up a mountain of evidence. But, gentlemen of the jury, what does it all amount to? These doctors are working together in the same hospital. Don't you see that they have a common interest to sustain each other, because every one of them may be in the same fix some day? Don't you know that they are clannish? They won't admit that one of them can make a mistake. Oh, no!" One could fairly see the impression his harrangue made upon the jury, and they rendered a verdict against the doctor, though it is certain the lawyers will say the fact of his being associated with the experts in the same hospital should and could legally not prejudice the jury. But it evidently did, all the same. And after such experience, can you for one moment believe it would not damage the physician's cause if it was shown he and his experts belonged to a society formed for the express purpose of mutual assistance in malpractice suits. A mighty poor lawyer, indeed, he would be who could not make a great deal out of it before a jury.

Very interesting was that part of the paper in which the doctor evolved his idea how this new society could prevent, ward off, malpractice suits. He believes the shysters would not be so eager to engage in this business if they knew they had to fight a corporation with plenty of means to employ the best legal talent. Why this should discourage those fellows, it is hard to understand. They do not sue poverty-stricken doctors. Whom they select for their victims they suppose to be rich, and consequently able to employ a good lawyer. They do not expect to have an easy game; but why should they not try it? They don't risk anything by it. The blackmailer's stake is only two dollars and a half for filing his application, and his lawyer's stake is his time, which is not worth much anyhow. So you see, they have nothing to lose, but much to gain. What difference should it make to them whether the opposing counsel is engaged by one physician or one hundred? If you wish to devise means by which this blackmailing nuisance can be stopped, or at least reduced to a minimum, you must try to get to the roots of the evil; that is, you must find the causes which usually bring it forth. And you will not go far to find them; for you will find them right at your door, in our own profession, in the shape of *indiscriminate dispensation of gratuitous services and of unkind remarks of one physician about another.* Physicians are altogether too quick to give their services gratis to almost anybody at any time. But you know very well people do not value very much what they can get for the mere asking; they do not think much of what they get for nothing. And it is also a wide-spread notion (especially among the lower uneducated people) that the quality of service is regulated by the amount of money they pay for it: that the treatment at a free Dispensary, because gratuitous, is not

the same, not as good as at the physician's office where they have to pay for it. These people cannot persuade themselves that a physician will take the same interest in a case whether or not he is paid for his services. The poor, therefore, are always suspicious that they do not get their full share of attention; they are quickly ready to charge their physician with carelessness if the case goes wrong. And with a patient in this frame of mind it takes but very little encouragement to bring a suit for damages. And in nine out of ten cases, doubtless, this encouragement is furnished by the members of our own profession. He did not mean to charge physicians with purposely, wilfully instigating a lawsuit against a professional brother. Though this has been done, such extraordinary baseness is a rare exception.

What Dr. Hotz had reference to is the inconsiderate, careless, thoughtless habit of expressing an opinion about a case or a colleague. To illustrate: A physician at a Dispensary shows a bad case to professional friends, and without thinking of the possible evil consequences, makes in the presence of the patient some remark like this: "Well, perhaps I ought to have done this or that." The patient already laboring under the impression that he was not fairly treated because he could not pay, sees in the doctor's remark the strongest confirmation of his suspicion, goes to a shyster and begins a suit for damages. And, doubtless, in a similar way the mind of a patient is often poisoned and set against his physician by a careless or unkind remark of another physician. So many physicians are always ready to express their opinion about their colleagues in the presence of anybody, or to criticise their professional acts upon the information received from a patient or some old woman. Now you all know how these people misconstrue the words of a doctor; how they pervert the facts inadvertently. You must admit you cannot rely on what patients tell you, and you cannot form an opinion that is worth anything of a case you have not seen or been informed about it by the attending physician. Why, then, don't you say so when some busybody asks you what you think about the case of Dr. H.? Or if you know the physician, say he is competent to attend to his own business; if you don't know him, change the subject. But at all events, unless he be a notorious quack, refrain from uttering any words which even only insinuate the possibility of a mistake or want of skill of your colleague.

Stop running each other down; stand by each other; sustain each other, "stick together and be clannish;" let it be understood in public that no reputable physician will prostitute himself by going to court as expert for a blackmailer. If all the reputable physicians of this city adopt and act on this principle, blackmailing the medical profession would soon be a thing of the past, and malpractice suits more effectually prevented than by the organization of a protective union.

Dr. P. S. Hayes said that from his costly experience in a malpractice suit he felt that an association such as suggested by Dr. Doering would be of great service. The lawyer employed by such an association would speedily acquire such a fund of medical knowledge that he would be considered an expert in malpractice cases. He would not require an amount of coaching necessary to prepare for any given case as would be requisite in the case of a lawyer who had had no experience in such cases. His opportunity for obtaining information in a given case would be largely extended, for each member of the association to whom he might apply would be interested in giving him the desired knowledge. He would soon become acquainted with medical witnesses and know which would give the best testimony in any case.

An association of the character suggested by the paper, might be a means of educating its members in regard to laws bearing on the rights of physicians and their patients, now not generally understood.

For one he is heartily is favor of such an association, and should give it his hearty support.

Dr. G. C. Paoli said Dr. Doering's paper is not only a valuab'e one, but contains such a high, noble, charitable feeling, that the society ought to be grateful to him. He wondered that such steps had not been taken before, because so many of our professional brethren have not only suffered annoyance, but pecuniary loss as well. How can we expect from an ignorant jury a decision based on scientific knowledge and justice?

Dr. F. M. Weller said that the subject of the paper was worthy of consideration; that the discussion of the formation of an association with an object so widely different from the Medical Society seemed out of place; the one essentially scientific, the other in the nature of an insurance. The right to form such an organization was unquestioned; the policy should be considered by each individual. That while anyone might be made the object of blackmail, he believed that charges of malpractice more frequently arose from the ignorance of physicians of the statutes affecting the practice of medicine, especially those of the criminal code, and of the rulings of the courts in cases.

Dr. H. D. Valin read a paper on

THE ORIGIN AND SIGNIFICANCE OF THE SEXES AND THE DETERMINATION OF SEX IN UTERO.

He said that it is not generally known that

intermediate steps exist by which sexual generation is evolved from a primitive mode of conjugation of two or more similar organisms. The process of conjugation observed in the slime molds resembles a sexual process of extreme simplicity. But this union seems to take place between undifferentiated individuals, and as no sexual organ or secretion is present, it could not be called sexual, and it is only a step higher than that observed by CH. ROBIN in the noctiluca, individuals of which sometimes swallow others of their own species as they would a particle of food.

The evolution of the sexes is epitomized in the three following species of the volvox family: *Pandorina morum*, *Volvox globator*, and *Volvox aurens*. In the first the spermatozoids are not differentiated from the granules of the ovum, in the second they are so differentiated, and in the third the two sexes exist each in a different colony.

In the animal kingdom, some species of molluscs contain an organ (ovo-testis) from which spermatozoids as well as ova are produced. In many animal species both sexes are contained in one individual, as in the case of tape-worm, leeches, earth-worms, barnacles, oysters, some star fishes; and among the vertebrates such is the case in several species of serranus, as well as in other fishes. However, most of the vertebrated animals have the sexual organs distinct in two different individuals, but a condition closely resembling hermaphroditism often occurs by reversion as an anomaly; and should any one disbelieve that some remote progenitor of the whole vertebrate kingdom has been hermaphrodite, there remains the facts "that at a very early embryonic period both sexes possess true male and female glands" (DARWIN), and in each mature individual rudiments of some of the sexual organs of the opposite sex are extant.

The condition of hermaphrodite is advantageous enough as long as the struggle for existence is but slightly marked, but in higher life, where the least advantage is of moment, hermaphroditism gives rise to separate sexes in the following manner: those hermaphrodites whose spermatozoids and ova mingle with the generative products of other hermaphrodites breed a progeny which is more vigorous than that resulting from a single hermaphrodite, and thus copulation between hermaphrodites became established is the struggle for existence; but this is an observed fact, for DARWIN said: "There is reason to believe that with all hermaphrodites two individuals, either occasionally or habitually, concur for the reproduction of their kind."

Of course that set of organs in one individual hermaphrodite which had been used more frequently would the better perform their function, while the opposite set would become less active; and then we would find some hermaphrodites with better developed male organs, and others with better developed female organs; and the progeny resulting from the union of two such more differentiated individuals would be especially favored in their struggle for life and would breed individuals in which one set of organs would be abortive, while the other would be highly developed, as is the case in as high an animal as man. Such a transitory stage as alluded to above is met in molluscs, and in the common oyster, the genital cœca in any given individual are found to be either almost all ovigerous or almost all spermigerous (HUXLEY).

In the case of hermaphroditic human persons the organs of one sex almost always predominate over those of the other.

The foregoing facts and inferences warrant me in formulating the following hypothesis, which will explain the law of heredity: In hermaphrodites, while the organs of one sex become more highly evolved, at the expense, as it were, of the opposite sex's organs, this latter set, as embryology proves, is slow to disappear, and concentrates itself in the germinal matter. In other words, as the male organs become better developed, the spermatozoids acquire a faculty for developing a female offspring, and vice versa. This hypothesis is based chiefly on the facts that the queen bee (HUXLEY) contains a male germ in each of her unimpregnated ova, while the male bee transforms, by means of spermatozoids, the same ova into females.

Determination of Sex in Utero.—In case each sex generally reproduces the opposite, as I claim, it is easy to understand why the number of each remains about stationary under ordinary circumstances. The law of THURY, of Switzerland, that "conception following menstruation produces females, and conception preceding menstruation produces males," harmonizes with my hypothesis if we consider that a greater number of spermatozoids and more active ova will reach the ovum in the uterus than would in the Fallopian tubes and in the ovaries, and should any given cause act to reduce one sex, the other sex would thrive the better and would reproduce a majority of the rarer sex, thus restoring the equilibrium, and insuring an equal number of either sex in the progeny.

There being no discussion on this paper, the society then adjourned.

VERNEUIL: Happy will be the surgeon who has no operating case, and knows how to cure his patient without it. I hope some day, thanks to progress, that surgery may cease to shed blood and to cause tears to flow.

DETROIT MEDICAL AND LIBRARY ASSOCIATION.

REGULAR MEETING, Dec. 21, 1885.

PATHOLOGICAL SPECIMENS.

DR. Walker exhibited a head of a femur which he had removed from a boy at Harpers Hospital, making the usual operation. The subsequent progress of the case towards recovery had been uninterrupted. The temperature had not ranged above normal.

DR. CARSTENS exhibited a coccyx which he had removed during the past week from a woman who, in her last confinement had had a rupture of the uterus and perineum, in addition to a broken coccyx. The patient quickly recovered from the effects of the operation, and the wound healed by first intention.

DR. WALKER read a paper on the Antiseptic Treatment of Wounds and Surgical Operations. He said that to-day surgeons were convinced that wounds may heal without suppuration, if properly treated. Listerism may be dead, but "its soul still goes marching on." Wounds are septic or aseptic. An aseptic wound is best illustrated by a simple fracture; where the bones unite, if properly adjusted, without suppuration. A septic wound is admirably illustrated by a compound fracture—open to the noxious germs existing in the surrounding atmosphere. If, however, we maintain similar conditions, as with the aseptic wound, we shall get similar results.

It has been definitely settled that fermentation is the result of the presence and development within a suitable medium of minute organisms. It is these micro-organisms which produce inflammation and suppuration in wounds. Taking this for granted, the question is, how shall we prevent the entrance of these germs? This brings us to antiseptic treatment. In choosing an antiseptic we must consider: (1.) Its power as a germicide or germ-restrainer. (2.) Its immediate local effect on wound surfaces, neutral, irritant, or caustic. (3) Its remote constitutional effect when absorbed into the general circulation. Carbolic acid, mercuric bichloride, and iodoform fulfil the indications for antisepsis the best, but the treatment must also comprise the preparation of patients, instruments, operator and assistants, as well as the subsequent protective dressings. For rooms, the best is the one that is highest; for the air is always purer at the greater elevation.

"An operation is quickly done when it is well done." The mechanism of an operation is secondary to its technique. DR. WALKER also gave a number of statistics bearing upon the superiority of the aseptic and antiseptic methods, and concluded by reading an article written by DR. STEPHEN SMITH, on the relative advantages and results of the old and new methods as in Bellevue Hospital.

DR. INGLIS said that the profession had now evidently reached the point where it was agreed that some kind of antisepsis should be carried out. DR. LISTER was said to have repudiated some of the claims he first made; yet the fact remained that Listerism had practically revolutionized the practice of surgery. He thought there was no man existing to whom honor was more justly due than to DR. LISTER. While DR. LISTER had, he believed, dispensed with the spray, there seemed to him to be some cases where the spray might be used with benefit.

DR. TILTON said there are few who do not see the benefit of taking antiseptic precautions, and he did not believe he should be doing his patients justice if he did not use thorough disinfection. He did not think it would be necessary to use a spray, but he would thoroughly disinfect all wounds.

DR. CARSTENS said he endorsed much of what DR. WALKER had said. DR. LISTER had discarded the spray, but it must not from that be inferred that he does not believe in antiseptic precautions. Cleanliness was the whole point. He dresses the wounds antiseptically, but the great point was to keep the wounds aseptic. We must dress little wounds the same way, using the same precaution, and we shall get better results.

DR. CHITTICK said that he had a different view to DR. WALKER of the ptomaines, which were doubtless poisonous, but were products, as he understood, of cadaveric decomposition.

DR. WALKER, in concluding the discussion, repeated his belief that "Listerism may be dead, but its soul is still marching on." The carbolic spray had in many cases been discarded, but only where something better was to be substituted. There was a perpetual progress in the discovery of germicides, and remedies were daily being more closely adapted to antiseptic requirements.

DR. MAIRE reported a case of

CARBOLIC ACID POISONING.

A woman had administered carbolic acid to her child and herself. She took her little child to the out-house, administered the acid to her child and afterwards swallowed the contents of the bottle herself. The doctor arrived about five minutes after she had taken the acid, and found the pulse scarcely perceptible and respiration very labored. He administered restoratives, but the patient died in about three minutes. Death occurred about ten minutes after taking the poison. The quickest death he found recorded being in eight minutes. The child presented the same symptoms as the mother. He ordered inhalations of ammonia, and in an hour and a half administered brandy. Shortly after this she had emesis. The amount of carbolic acid taken could not be determined

because very little would produce these symptoms.

Dr. Longyear reported another case of carbolic acid poisoning which had occurred the same day as Dr. Maire's. A man had taken a dose of carbolic acid and sweet oil in mistake for a cough syrup. He got there fifteen minutes after the event and found the pulse very weak. He administered brandy freely and the next day the patient was well, but very weak. He believed that it was the oil in this case which saved the patient.

Dr. Clark said that he was called a short time ago to a case of diphtheria. The child while in an ailing condition had been taken to a wedding and four days afterwards had exhibited symptoms of diphtheria. After this he was called to another case which could only be accounted for by being contracted from the first child. The same night he was called to another and then another. In all he found eleven cases resulting from the first one. The cases seemed to be of the gravest constitutional form, the patients dying from the poison itself.

Dr. Carstens was called last Friday to a case of labor where a midwife had been in attendance. He found an elbow presenting and detected no pulsation in the cord. He turned and applied the forceps. On delivery the cord manifested no pulsation, but efforts at resuscitation were successful.

About four weeks ago, continued the doctor, an old midwife arrived in New York. She attempted the next day to get into a train and slipped and contracted hernia. Next day she came on here and narrowly escaped being killed at Pittsburg in an accident. When she arrived here she did not pay much attention to the hernia, but subsequently called me. With the assistance of Dr. Walker I operated and she thus had another chance of being killed. She made an uninterrupted recovery, and although she ran three chances of being killed her life is still preserved.

Dr. Lundy, reverting to the cases of carbolic acid poisoning, recorded a case where an eight-grain solution of carbolic acid was dropped into the eye by mistake, and had produced a very severe form of inflammation, and a severe ulceration of the epithelial covering of the ocular conjunctiva. The curious thing was that so small a portion of carbolic acid should produce so severe a result. About the same time he saw a very severe injury from putting into the eye a corrosive sublimate solution, and this very much weaker than the carbolic acid solution.

Adjourned.

Geo. Duffield, M.D.,
Secretary.

Voltaire: Ideas are like beards. Men have them when they grow up: women never have them.

Correspondence.

TUMOR IN THE JUGULAR VEIN, LEFT SIDE.

Miss C. presented herself with a tumor extending from the ear, along the line, and above and below the jaw—apparently—but more especially below, covering a space, longitudinally, of five inches, and vertically, of about three and one-half. After carefully examining, we concluded:

1. No glands were involved.
2. That the tumor was deep.
3. To operate.

Accordingly, after due preparation, we placed her on the chair, put her under ether, and I proceeded to cut down on the body. I found an immense amount of fatty deposit around the parts, and no distinct glandular enlargement. I cut through a subcutaneous branch of the facial, also a large deep branch, after which, at the depth of one inch, the body of the tumor was laid bare. At first I concluded to remove sac and all together, but, after careful sponging and examination, we concluded to open the sac in which the tumor seemed to be located. To do this was the work of a moment, and it was done with the handle of my tenaculum. Judge of my surprise when venous blood began pouring out of the wound, flooding everything in a moment. I at once passed in my finger and found the tumor lying unattached in the vein, and turned it out in an instant. I then passed in my little finger and pushed it into the opening in the lower part of the sac, from which poured the blood. Following this movement with outward pressure, the blood being checked by my assistant, Dr. Potts, seized a tenaculum, passed it through the vein from the inside of the sac, and drawing it up, I applied another ligature. The hæmorrhage permanently stopped, and we both took a long breath, deep and satisfactory. Parts of the tumor under the microscope show great proliferation of large cells, the cells very closely resembling brain matter. The tumor otherwise presents, on section, appearances very much like brain matter, but more dense and organised. There are no well-defined striæ in it, and, altogether, we regard it and its position as very unique. Has any of your thousands of readers met with a similar case? If so, we will be happy to exchange opinions with him.

S. Edward McCully, M. D.

Toronto, Ont.

An English doctor having reported a case in which he treated a child eight years old who was suffering from delirium tremens, an innocent secular contemporary says his sense of shame should have kept him from saying anything about it. If the child persisted in drink, all right, but it was very wrong to treat it.

A STONE OF SIXTEEN YEARS' GROWTH IN THE NOSTRILS OF A HEALTHY WOMAN.

In the year 1868, being called to see a little girl who was supposed to have thrust some hard substance up one of her nostrils, I found what I thought to be a small shoe button, far up the nostril. Manipulations, sneezing, and a sharp puff of breath into the mouth of the child having failed to dislodge it, I opened my pocket case of instruments, and thought to remove it either with the scoop or with the alligator-jaw forceps. But she was so frightened at sight of the instruments that I could get no chance to try them there. I therefore gave some directions, and left with the understanding that I was to be called again as soon as she should seem willing to have the instruments used.

From that time on the case to me was out of sight and out of mind, until some two years since, at which time I was called, in company with the family physician, to see a patient who had a "bony tumor" in her nose. Upon entering the house I recognized the patient as the up-growth of the little girl that once had a button up her nose. She said she was the same girl, and did not think the button had ever moved from the place where it first loged. Thereupon I assured the attendant that the "bony tumor," which was plain to be seen far back in the nostril, was nothing more than that same shoe button, with bony secretions surrounding it. The doctor then seized it with the alligator-jaw forceps, and after a while, by persistent and careful traction, succeeded in removing it. It was broad and flat, and more than twice the size of a Lima bean, but similar in shape. Upon breaking it open, the small black shoe button supposed to have been lodged in her nostril sixteen years before, was found imbedded in the centre.

T. B. NICHOLS, M. D.

PLATTSBURGH, N. Y.

They are beginning to complain, in Germany, of the over-production of professors there. The unfortunate practitioners who cannot secure professorships, complain that the prestige of college connection gives their rivals an undeserved advantage. Little things like that don't bother the profession of this country. When a doctor wants the prestige (?) of a college connection here, he simply buys it. It's a poor stick of a doctor who hasn't saved up enough to buy a professorship, in this country. The prices are somewhat fluctuating, but they usually keep quite low enough for ordinary demand.

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Editorial.

DISINFECTANTS.

The committee appointed by the American Public Health Association in Oct., 1884, charged with the task of preparing a list of the various disinfectants best adapted to the different conditions demanding their use, submitted their report at the meeting of the Association held in Washington on December 8th, last. The report is of a very practical nature, and we select therefrom a number of recommendations, the value of which our readers will readily comprehend:

FOR EXCRETA.

(*a*) In the sick-room:

For spore-containing material;

1. Chloride of lime in solution, 4 per ct.
2. Mercuric chloride in solution, 1:500.*

In the absence of spores;

3. Carbolic acid in solution, 5 per cent.
4. Sulphate of copper in solution, 5 per cent,
5. Chloride of zinc in solution, 10 per cent.

(*b*) In privy-vaults:

Mercuric chloride in solution, 1:500.†

(*c*) For the disinfection and deodorization of the surface of masses of organic material in privy-vaults, etc.:

Chloride of lime in powder.‡

FOR CLOTHING, BEDDING, ETC.

(*a*) Soiled under-clothing, bed-linen, etc.:

1. Destruction by fire, if of little value.
2. Boiling for at least a half-hour.
3. Immersion in a two-per-cent. solution of mercuric chloride of the strength of 1:2000 for four hours.§

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* The addition of an equal quantity of potassium permanganate as a deodorant, and to give color to the solution, is to be recommended. (Standard solution No. 2.)

† A concentrated solution containing four ounces of mercuric chloride and one pound of cupric sulphate to the gallon of water is recommended as a *standard solution*. Eight ounces of this solution to the gallon of water will give a dilute solution for the disinfection of excreta, containing about 1:500 of mercuric chloride and 1:125 of cupric sulphate.

‡ For this purpose the chloride of lime may be diluted with plaster-of-Paris, or with clean, well-dried sand, in the proportion of one part to nine.

§ The blue solution containing sulphate of copper, diluted by adding two ounces of the concentrated solution to a gallon of water, may be used for this purpose.

4. Immersion in a two-per-cent. solution of carbolic acid for four hours.

(*b*) Outer garments of wool or silk, and similar articles, which would be injured by immersion in boiling water or in a disinfection solution:

1. Exposure to dry heat at a temperature of 110° C. (230° F.) for two hours.

2. Fumigation with sulphurous acid gas for at least 12 hours, the clothing being freely exposed, and the gas present in the disinfection chamber in the proportion of four volumes per cent.

(*c*) Mattresses and blankets soiled by the discharges of the sick:

1. Destruction by fire.

2. Exposure to super-heated steam—25 lbs. pressure—for one hour. (Mattresses to have the cover removed or freely opened.)

3. Immersion in boiling water for one hour.

4. Immersion in the blue solution (mercuric chloride and sulphate of copper) two fluid ounces to the gallon of water.

FURNITURE AND ARTICLES OF WOOD, LEATHER AND PORCELAIN.*

Washing, several times repeated, with:

1. Solution of mercuric chloride 1:1000. (The blue solution, four ounces to the gallon of water, may be used.)

2. Solution of chloride of lime, 1 per ct.

3. Solution of carbolic acid, 2 per ct.

FOR THE PERSON.

The hands and general surface of the body of attendants, of the sick, and of convalescents at the time of their discharge:

1. Solution of chlorinated soda diluted with nine parts of water (1:10).

2. Carbolic adid, two-per-cent. solution.

3. Mercuric chloride, 1:1000; recommended only for hands, or for washing away infectious material from a limited area, not as a bath for the entire surface of the body.

FOR THE DEAD.

Envelop the body in a sheet thoroughly saturated with:

1. Chloride of lime in solution, 4 per ct.

2. Mercuric chloride in solution, 1:500.

3. Carbolic acid in solution, 5 per ct.

FOR THE SICK-ROOM AND HOSPITAL WARDS.

(*a*) While occupied, wash all surfaces with:

1. Mercuric chloride in solution, 1:1000. (The blue solution containing sulphate of copper may be used.)

2. Chloride of lime in solution, 1 per ct.

3. Carbolic acid in solution, 2 per ct.

(*b*) When vacated:

Fumigate with sulphur dioxide for 12 hours, burning three pounds of sulphur for every 1000 cubic feet of air-space in the room; then wash all surfaces with one of the above-mentioned disinfecting solutions, and afterward with soap and hot water; finally throw open doors and windows and ventilate freely.

* For articles of metal, use solution No. 3.

FOR MERCHANDISE AND THE MAILS.*

The disinfection of merchandise and of the mails will only be required under exceptional circumstances; free aeration will usually be sufficient. If disinfection seems necessary, fumigation with sulphur dioxide, as recommended for woolen clothing, etc., will be the only practicable method of accomplishing it.

RAGS.

(*a*) Rags which have been used for wiping away infectious discharges should at once be burned.

(*b*) Rags collected for the paper-makers during the prevalence of an epidemic should be disinfected before they are compressed in bales by—

1. Exposure to super-heated steam (25 lbs. pressure) for ten minutes.

2. Immersion in boiling water for half an hour.

(*c*) Rags in bales can be disinfected by injecting super-heated steam (50 lbs. pressure) into the interior of the bale. The apparatus must insure the penetration of the steam into every portion of the bale.

* In order to secure penetration of the envelope by sulphur dioxide, all mail matter should be perforated by a cutting stamp before fumigating.

PASTEUR'S PROPHYLACTIC FOR HYDROPHOBIA.

The medical sensation of the day is PASTEUR'S prophylactic treatment of hydrophobia, and there are indications that it may become one of the "crazes." The treatment has been inaugurated with such *eclat* abroad that it would be strange indeed if, in this country, it did not find numerous practitioners. Reports of proposed institutions for "Pasteurization" against hydrophobia have already begun to appear, and, doubtless, such institutions will soon multiply. There are constantly with us, like the poor, a number of unevenly-balanced enthusiasts, who are ready and eager to seize upon every opportunity to achieve notoriety, and especially when it can be combined with a prospect of profit. The result of the establishment of these institutions will be the development of a large crop of pseudo-hydrophobia, even as the effect of the establishment of a cancer infirmary is to develop numerous cases of cancer, where previously the tumors were regarded as nothing more than innocent growths.

The dog will be a great sufferer from the "craze." While he may be tolerated, he will be placed under suspicion, and the most inadvertent scratch from his tooth will, besides furnishing a case calling for "Pasteurization," be an offense calling for the capital punishment of the culprit.

PASTEUR himself discourages the disposition to follow after him, which has begun to crop out in this country:

"These gentlemen," he says, "are in too much of a hurry. It is premature to attempt anything yet. Wait until we see how the Newark children get along. Wait, at least, until March, when the series of experiments, already commenced, will enable me to make known facts and data much more specific and detailed than anything yet published. Of course, I feel very much flattered to hear that Americans have seen fit to give my name to the institute, but in pure interest of science delay is needed, as everything so far is merely experimental."

AN INTERESTING PIECE OF VACCINATION HISTORY.

We have been favored, by one of his descendants, with the following extract from the notebook of DR. E. S. LEGGETT, who was a contemporary of DR. SEAMAN, and one of the first to introduce vaccination into this country:

"DR. VALENTINE SEAMAN lost an infant daughter, his first child, in 1795, by inoculation with small-pox, and was thus induced to give his attention to the introduction of the kine-pock to America. The kine-pock was discovered by DR. JENNER, from the fact that milk-maids were seldom, if ever, subject to attacks from small-pox. After a good deal of correspondence with DR. JENNER, DR. SEAMAN received from him kine-pock points in quills, and he very successfully introduced it in New York. The Quakers were greatly opposed to inoculation with small-pox, as it looked to them like 'tempting Providence,' hence DR. SEAMAN'S persistency in following the new idea. The introduction was generally opposed by the entire faculty. His own children were the first upon whom he operated. After the loss of his daughter, he declined to inoculate with small-pox, and his having operated upon his three children, gave confidence to his patients. He wrote a book on the subject and had a plate made (copper), showing the different stages of the disease, and these books and plates were gratuitously distributed to all physicians, sent by mail and otherwise, and after a great deal of opposition from all quarters, he was finally successful. He gave away, never charged for, books, plates, or points. His enthusiasm was so great on the subject that its introduction may be said to have been the ambition of his life. He lectured at the New York Hospital, and at one time exhibited his children to his class, some years after, to prove the solidity of his theory. He visited Europe with JOHN JAY, in 1809 or 1810, for his health."

THE INCARCERATION OF COCAINE.

An ingenious method of securing the prolonged anæsthetic effects of cocaine on a part, without causing constitutional intoxication, has been lately devised. It consists in shutting off the circulation from the part into which the anæsthetic has been injected. This is done, in the case of operations on the extremities, by means of the tourniquet or a heavy rubber band, the part having been previously rendered bloodless by the application of an ESMARCH'S bandage. In order to avoid the injection of the fluid into a vein, the part may first be rendered turgid by obstructing the venous circulation and the course of the prominent veins mapped out by means of a blue pencil. In the case of operations on the face and parts on which the tourniquet cannot be applied, hæmostatic rings may be applied and retained in such manner as the ingenuity of the operator may be able to suggest. A smaller quantity of cocaine is also required by this method than in the ordinary way of employing it, which fact, taken in connection with the absence of constitutional derangement, makes it a very decided improvement, for, besides the expense saved, the freedom from constitutional effect is a desideratum of much importance. The value of this drug is thus greatly enhanced and the range of its usefulness very much widened.

OLEO-RESIN OF KAVA KAVA AS A LOCAL ANÆSTHETIC.

DR. L. LEWIN, author of Untoward Effects of Drugs, has been making some experiments with kava kava, during the course of which he has discovered a substance, residing in the oleo-resin, which he declares has similar properties, as a local anæsthetic, to cocaine. At the suggestion of DR. L., MESSRS. PARKE, DAVIS & CO. have prepared an oleo-resin of the drug, and from experiments made with it at their laboratory, the reports of its peculiar anæsthetic action are likely to be corroborated by the profession. MESSRS. P. D. & CO. will furnish samples of their preparation to such physicians as are disposed to test the peculiar claims made for it, and we trust that such of our readers as may give it a trial will favor us with their report of results. An exhaustive paper, embodying a report of his physiological experiments, is promised by DR. L. in a short time, but there are evidently no specific instructions necessary to a trial of the drug by

such practitioners as are familiar with the manner of employing cocaine.

Notes.

The following report of an autopsy is by a physician who is said to be doing a lucrative practice in Delta, Ohio. It goes to show that success in gaining the confidence of the community is not necessarily conditioned on such an appreciation of anatomy, physiology and pathology as the modern school holds to be correct:

E. C. C. opened on the 26th day of Sept. 1885, for post-mortem examination, we find that sickness first started in the kidney No. 31, and from there to the hip bone No. 15; from there to the spine No. 1; from that to blood cancer or abscess, blue cancer, etc.

From large artery to 6th rib affected and to the muscles of hip, where started the ulcer on left side; and thence to the urine, from thence to large intestine, and thence to membrane lining of stomach which became ulcerated; from thence to gravel stone and worms in kidneys; from thence to large intestine which was affected fifteen yards; and from there to a milky deposit in the bladder; and thence back again to the kidneys; from thence to hair veins: from thence to back and thence to stomach; and thence to bladder; and thence to a fever all through the system.

No. 31, the liver's weight was 4 lbs., which was badly affected and mortified; from thence to the largest nerve which is connected to the brain, which affected them. Weight of kidney one-half pound.

The doctor's statement before opening the corpse was consumption of the liver and kidney.

The Medical Record discusses in its usual learned manner the subject of baldness, and we read its dissertation all the more eagerly because of the hope of gleaning some hint from such a high source, which we might utilize to the prophylaxis of the threatenening alopecia in our case. Our contemporary, however, has nothing but theories to offer for our aid. When our brother SHRADY discovers a "Hair tonic" warranted to prevent man from shedding his capillary adornment at any time of life, the blessings (and the ducats) of uncounted millions will be his. We know of a sufficient number, in our limited acquaintance, who would cheerfully contribute more money than he makes in a year, for the secret. Our contemporary advises, as a preventative of falling hair at forty, that the individual commences paying special attention to his scalp at twenty. The neglect of the care which he holds to be necessary does not, however, seem to injuriously affect the heads of our women, who, as a rule, we believe, pay less attention to their scalps than men. No, there is some other cause at work, and we have concluded that it resides in the fact that fashion prescribes that the latter shall keep their hair more or less closely clipped. The consequent drain on the bulb exhausts its vitality after about forty years, and hence we have so many shining pates after that age. If men would retain their hair like women, let them, like women, cease from having it cut. The Indian dosen't get bald because there are no barbers among the aborigines.

The Indiana Pharmacist lets drop the following solid chunk of wisdom: The average physician will frown upon and talk down all patent bitters, kidney and liver cures, cough syrups, and like nostrums, denouncing them as frauds and swindles, and if a druggist ventures to prepare any of these things himself, and put them on the market, he is looked upon and spoken of as no better than a rascal and a robber. Yet this same doctor will complacently write a ℞ for celerina, iodia, aletris cordial, bromidia, acid mannate, Fellow's syrup, Wheeler's elixir, oleo-chyle, papine, hydroleine, listerine, phosphopeptine, or any other of the many nostrums that are prepared for and advertised to the medical profession only, and of the composition of which he knows absolutely nothing. "O consistency, thou art a jewel," not found in the diadem of the average physician.

A Parisian journal tells a story of a young married woman who was about to become a mother but who objected to being attended by the family physician, because of his sex, and insisted on having a midwife. Not wishing to expose her to any of the dangers of the ignorance of this class, the physician conceived the idea of having a young and beardless friend, who was a competent obstetrician, dress in female attire and personate a midwife. The ruse worked to the entire satisfaction of all concerned, but the doctor, who was put to a severe trial by all the female members of the family, who insisted on his examining sundry little tumors and blemishes on various parts of the body, which they would not expose to the gaze of a male doctor. The wounded modesty of the young M. D. was, however, healed by a plaster in the shape of a 500-franc note.

"Doctor, I have a beastly sick-headache. What can you do for it?" "Well, I can sympathyze with you, for I am troubled in the same way myself." "But your sympathy doesn't help me a bit. Give me something to take." "Well, here's a prescription that will help you." After the patient leaves, the doctor lies down for a nap, saying: "a sound sleep

is the best thing I know of for a sick-headache." To have prescribed this for his patient would not only have spoiled a fee, but would also have been to cast pearls before swine. He was a thrifty doctor, and withal a good judge of nature. The moral is not hard to discover.

At a meeting of the Detroit Medical and Library Association on the 9th ult. the following resolutions were adopted on the death of DR. CHARLES A. BABCOCK, a late member:

Resolved, That during his association with us he commended himself to us all as a man of genial and cordial manners, earnest in the discharge of his professional duties, and his death while yet in middle life is a source of sincere regret to us as well as to his friends and family, and to the latter we offer sincere sympathy.

Resolved also that a copy of this resolution as entered on record, be duly transmitted by the secretary to the widow of the deceased as an expression of our sympathy in her sad affliction.

A contemporary asserts that in England two doctors die for every clergyman. Such self-sacrifice on the part of the doctors for the gentlemen of cloth, is such quintessence of professional courtesy as we hope will never become popular in this country. We respect the clergy very much, in their place, but when it comes to asking two doctors to die for one preacher, we shall enter our feeble protest.

MRS. RYAN, who recently went from Newark, N. J., with the dog-bitten boys to have PASTEUR inoculate them with minimized rabies, gave birth in mid-ocean, on her way home, to a son. The initials of the young man's name will be P. P., he having been christened PATRICK PASTEUR RYAN.

A case is reported in the Deutsche Med. Wochenschrift in which a woman was delivered of a child while in a state of hypnotism. The labor was painless and the woman did not realize that she had given birth. The accoucheur who can combine mesmerism with his art, will be in future demand.

Obstetricians are all torn up over the announcement that a woman recently had a litter of seven babies. At last reports the mother and a majority of the offspring were doing well, and the attending accoucheur is sanguine of his ability to pull the old man through, although the shock was very severe.

Book Notices.

MILK ANALYSIS AND INFANT FEEDING. A Practical Treatise on the Examination of the Cow's Milk, Cream, Condensed Milk, etc., and Directions as to the Diet of Young Children. By Arthur V. Meigs, M.D., Physician to the Pennsylvania Hospital and to the Children's Hospital; Fellow of the College of Physicians of Philadelphia, etc.
Philadelphia: P. Blakiston, Son & Co.
Detroit: John MacFarlane.

This is a duodecimo volume of a hundred pages. Its importance is, however, not conditioned on its size. Its subject is one of the most important, if not the most importaut demanding the physician's attention. The future of the man, in a physical sense, is largely fixed during his infantile existence. The ill-nourished infant will never be a large and vigorous adult, and the converse of the proposition is the rule. There is no proper substitute for the milk of a healthy mother, and when a child is obliged through circumstances to forego this food, too much intelligent attention cannot be bestowed on its artificial nourishment. Artificially-fed children are very prone to die during infancy, and when they do survive they are extremely apt to be weaklings and to be stunted in their subsequent growth. It is feared that these facts are not properly recognized by either parents or physicians.

The little work before us is from the pen of one who gives evidence of the fullest qualifications for the task he has undertaken. It is divided into chapters devoted respectively to Method of Analysis, Statement of Results and Comparison of Human and Cows' Milk. Proof that Human Milk Contains only about one per cent. of Casein, Observations Upon Methods of Analysis Heretofore Pursued, Artificial Feeding of Infants, and a Conclusion, which embodies the practical deductions from the whole. The book is one which every practitioner who recognizes the importance of hygiene and its place in the qualifications of his high calling, should carefully study, containing, as it does, in compact limits all essential information on its vital subject.

THE USE OF THE MICROSCOPE IN CLINICAL AND PATHOLOGICAL EXAMINATIONS. By Carl Friedlaender, Private-docent in Pathological Anatomy at Berlin. Second Edition, Enlarged and Improved, with a Chromo-lithograph. Translated, with the Permission of the Author, by Henry C. Coe, M.D., M.R.C.S., L R C.P. (Lond.), Pathologist to the Woman's Hospital in the State of New York.
New York: D Appleton & Co.
Detroit: John MacFarlane.

There are many works on how to use the microscope, in the market. Some are large, verbose and exhaustive; others are small and pithy, and, nevertheless, fully cover the ground. The book before us is of the latter kind, and it is safe to say that there is no work better adapted than it to the needs of the beginner. It is especially full as regards *technique*, which is just what the neophyte most requires Explicit instructions are given on the preparation and mounting of specimens.

STUDENTS' AID SERIES. Aid to Surgery, to Gynæcology, to Medicine, and to Obstetrics. By various Authors.
New York and London: G. P. Putnam's Sons.

The design of these little books, one of which is devoted to each of the subjects above mentioned, is, apparently, to take the place of

the notes which the student ordinarily takes when attending lectures. If permitted only to take the place of these, they would be very valuable, the notes being very concisely and systematically arranged, and thus permitting the student to devote his whole attention to the lecture. Note-taking at lectures has advantages and disadvantages. By using these "Aids," all the benefits can be secured without the drawbacks. If kept in their legitimate place their use should be encouraged; the abuse of these consists in relying on them for all the information on the subjects to which they are devoted.

Diagram of Parliamentary Rules, with Key.—Containing Concise Hints and Directions for Conducting the Business of Deliberative Assemblies. By Uriah Smith. Second Edition. Revised.

Battle Creek, Mich: Review and Herald Publishing Association.

All things should be done decently and in order. That physicians are not, of all men, the best posted in regard to the decent and orderly conduct of meetings, is often painfully apparent in their societies. A lack of information touching the rudiments of parliamentary practice is often the cause of confusion worse confounded. The diagram before us spread out before the most inexperienced presiding officer, would enable him to keep things straight. It answers, at a glance, over five hundred questions in parliamentary practice. The answers, we have found in looking them through, are singularly accurate, being only in a very few instances in conflict with the standard authorities.

Lectures on Syphilis, Delivered at the College of Physicians and Surgeons.—By G. Frank Lydston, M. D., Late Resident Surgeon at Charity Hospital, and at State Emigration Refuge and Hospital, New York City; Lecturer on the Surgical Diseases of the Genito-Urinary Organs, and on Venereal Diseases, in the College of Physicians and Surgeons, Chicago, etc. Reported by Wm. A. Walker, A. M., M. D., Attending Physician, West Side Dispensary.

Chicago: A. M. Wood & Co., 104 Madison St.

Any one who may look through these lectures to discover anything new, would have his labor for his pains. The book, moreover, cannot be called an original work, nor does it make any such pretentions. It is, however, a very concise statement of existing knowledge touching syphilis, and the student will find it to furnish him in a few hours' reading more plain, practical matter touching the disease than his limited library can supply, and more than the time at his disposal would permit of his delving for were his book shelves to contain all the treatises written on the subject.

Medical Progress.

Remarks on a Few Articles of the Indian Materia Medica.—Within the last few years, considerable attention has been paid to the subject of the Indian materia medica. The writings of Fleming, Roxburgh, Ainslie, Royle, O'Shaughnessy, Wise, Bidie, Kkani lall Dey, Moodeen Sheriff and others (amongst whom I think I may venture, without laying myself open to charges of egotism, to include myself) have succeeded in awaking medical officers and other practitioners in the East to the important fact that around them on every side in the vast Indian continent, from Himalayas to Cape Comorin, there are available, at almost nominal prices, often at the simple cost of collection, remedies as powerful and efficient as the more costly imported articles, the supply of which, from the very nature of things, is necessarily limited, and at times precarious. The spirit of inquiry thus set on foot resulted in many indigenous drugs being subjected to clinical trials in European hospitals and elsewhere, where their effects could be carefully watched; and, their alleged efficiency having been satisfactorily proved, they in due time were admitted into the official list of the British Pharmacopœia; of this we have examples of Indian hemp (cannabis sativa), chiretta, hemidesmus Indica, ægle marmelos, and kamela. On satisfactory, though not perhaps on equally conclusive, evidence, no fewer than 40 other articles were admitted into the official list of the Indian Pharmocopœia issued by the Indian government in 1868. Some of these latter have since found their way into Europe, and are at present under trial in the hands of British and continental practitioners; for example, chaulmoogra-oil, sandalwood oil, gurjun balsam, anacardium (cardol), etc. What the verdict will be, remains to be seen.

To enter on the consideration of Indian materia medica in general is beyond my intention, and indeed, beyond my powers. All that I propose to do, on the present occasion, is to offer some brief suggestions on a few articles which appear to me worthy of more attention than has been paid to them, and which seem to hold out the prospect of proving valuable therapeutic agents.

Carum (Ptychotis) Asowan.—The first of these to which I would direct attention is the fruit of carum (ptychotis) ajowan, D.C., an umbelliferous plant common under cultivation throughout India, sold in the bazaars under the name of ajawain or ajvain (Bengal) and o'mam or o'mum (Tamul). Under the name of ajava-seeds, they were brought to the notice of the profession in Europe in 1773, by Dr. Percival (Essays, vol. ii, p. 226), but they fell into unmerited neglect. My own impression is that they are the most powerful of all the umbelliferous carminative seeds, and that they may well replace others in practice. Dr. G. Bidie and Mr. J. J. Wood, both of the Madras Medical Service, have borne strong testimony to their value; the latter regarding them as combining the stimulant quality of capsicum or mustard with the bitter property of chiretta

and the antispasmodic virtues of assafœtida. An essential oil (of which they contain about 5 per cent.) and a distilled water, are official in the Pharmacopœia of India. Greatly increased interest attaches to this article from the recently discovered fact that its stearoptene, sold in the bazaars of the Deccan, Scinde, etc., under the Hindústani name of ajwain-ka-pheúl, is identical with thymol, whose claims as an antiseptic and germicide have of late attracted much attention. The fruit, indeed, is now a recognised source of this valuable antiseptic agent. Without attempting to enter upon its therapeutic uses generally, I would point out two diseases in which it seems very desirable that trials should be made to test its powers. 1. Cholera. Here Anglo-Indian testimony is already strongly in its favor, but we want more than public opinion; we want facts based on scientific observation, and it is hoped that this may be accorded to it by our professional brethren in the East. The antiseptic properties of its constituent, thymol, conjoined with its powerful diffusible stimulant action, indicate the probability of its proving of the greatest service in this disease. 2. Dipsomnia. All I desire here is to draw serious attention to the following words of the late Mr. J. J. Wood, with reference to ajvain or o'mam seed: "On account of its bitter, biting, or pungent, yet pleasant, taste, and the sensation of warmth it creates in the stomach, it has been constantly recommended of late years to those afflicted with the desire for alcoholic drinks. It does not, of course, intoxicate, but it is no mean substitute for the ordinary stimulant in removing, almost immediately, the sensation of 'gnawing' or 'sinking at the pit of the stomach' which the frequent use of spirits invariably brings on. And I have been assured that it has been the means of rescuing many otherwise sensible and useful men from slavery to the habit of spirit-drinking." Sincerely is it to be hoped that those in this country who have charge of inebriates or dipsomaniacs will make trial with this remedy.

Plantago Ispaghula.—Another seed commonly met with in all Indian bazaars, which seems to me to merit more attention at the hands of European practitioners than is generally paid to it, is that of plantago ispaghula, roxb. sold under the name of ispaghúl (Hind.), and ishappukól-virai (Tamul). When these seeds are immersed in water, the cells composing the epidermis swell and elongate, and soon burst, leaving only fragments of their walls. On infusion, mucilage is so abudantly yielded by them, that one part of them with 20 of water forms a thick tasteless jelly. Fleming, Ainslie, and other early writers on Indian materia medica, spoke of their usefulness as a demulcent in catarrhs, renal affections, dysuria, etc., but it is to their use in intestinal affections that I would particularly direct attention. The late Mr. Twining, in his Diseases of Bengal (vol. i, p. 212), speaks highly of them; and in the chronic diarrhœa of Europeans who have been long residents in India, he states that he found ispaghúl seeds to answer better than any other remedy. He found that it also sometimes cured the diarrhœa of European and native children after many other medicines had failed. The dose of the seeds for an adult is two and a-half drachms, with half a drachm of sugar-candy. They are administered whole, and in their passage through the intestines, they absorb as much fluid as makes them swell; and by the time they reach the central and lower portions of the canal, they give out a large amount of bland mucilage, and this they continue to do until they have passed over the whole of the intestinal tract. If the frequency of the dejections be restrained by anodyne injections, and by using only a small quantity of food, the demulcent action of these seeds is thought to be increased. It is said that a slight degree of astringency, and some tonic property, are imparted to the seeds by subjecting them to a moderate degree of heat, so that they shall be dried and slightly browned. A lady in London, the wife of a retired general officer, shortly since related to me the case of a friend of hers who had been obliged to return home from Bengal for chronic dysenteric diarrhœa. The case was treated by some of the leading men in England without deriving benefit. The lady, remembering her Indian experience, sent out to Calcutta for a supply of ispaghúl seeds, gave them after native fashion, as above, and effected a cure; or, at any rate, the patient recovered. It may, of course, have been merely a coincidence, but, taken in conjunction with the reports of Mr. Twining and others, it is worthy of note.

Scopolia Luridus.—The third article to which I would direct attention, is a solanaceous plant of Nepaul and the Himalaya, scopolia luridus *Dunal* (Anisodus luridus; *Linn.*), which, as a mydriatic, appears to be equal, if not superior, in power to belladonna. It was introduced into Europe in 1824, and is now cultivated there in gardens. The leaves, which are of a pale-green color, emit, especially when bruised, a peculiar tobacco-like odor. A tincture prepared with them, in proportion of one ounce to eight ounces of alcohol, administered to different patients, was found to produce extreme dilatation of the iris, and this, in two instances, to such an extent as to cause blindness, which only disappeared when the medicine was discontinued. The largest dose given was 20 drops of the above tincture during 24 hours. (See further details in Vol. ix, of Braithwaite's Retrospect, p. 119, from Gaz. Méd., November 4, 1843.) Locally applied, its power as a mydriatic is equally well marked. The late Sir R. Christison (Indian Medical Gazette, September, 1868) with that bold self-sacrificing spirit which characterised many of his investigations, made trials with this plant in his own person. He introduced about the fourth of a drop of juice from a leaf-stalk into his left eye, and found that it immediately dilated the pupil with all the energy of belladonna. In 40 minutes the dilatation was complete. This effect passed off more slowly than when produced by belladonna. When he made a similar trial with the root-juice of belladonna, he found that the pupil was restored to its natural size in four days; but the dilatation produced by this plant was still perceptible at the end of eight days. Commenting on these facts, Sir R. Christison naturally asks, why should India depend upon Europe for one of the armamenta chirurgiæ when it has one as good, if not better, of indigenous growth? And

he goes on to suggest that trials should be made with it to ascertain whether it would have the same effect as henbane and belladonna in correcting the acrimony of resinous cathartics, and the same singular effects as these drugs when administered in large doses. He concludes by expressing a hope that our brethren in the East will soon settle these points by actual experience, a hope which I beg most emphatically to re-echo.

JATROPHA CURCAS.—Another subject, which appears to me well deserving of notice at the hands of the therapeutist, is the styptic or hæmostatic virtue of the milky juice of English physic-nut, Jatropha Curcas *Linn.*, a widely distributed plant throughout the tropical portions of both hemispheres. The styptic properties of this juice were first brought to notice by BABOO UDOY CHAND DUTT (Indian Medical Gazette, October, 1874, page 260) in 1874; and he furnishes two illustrative cases—one, a bleeding vessel within the cavity of an open abscess; the other, hæmorrhage following an incision made for the purpose of extracting a broken piece of bougie from the urethra—in both of which the local application of the fresh juice had the effect of immediately arresting the bleeding, although, in the first place, pressure, alum, turpentine, and perchloride of iron had failed to effect it. He stated that "it does not cause pain nor act as a caustic, but that it simply 'curdles' (that is, coagulates) the blood, and covers the bleeding surface with a tenacious fluid." Further evidence of its hæmostatic properties is added by MR. B. EVERS (Indian Medical Gazette, March, 1875, page 66), of the Bengal Medical Service, who furnishes also a highly interesting account of a pulsating tumor, "a varicose aneurysm," situated just above the internal malleolus, which was cured (?) by the subcutaneous injection of a drachm of this juice. The case is so suggestive that I venture to append it, slightly abridged.

Hæmostatic Powers of Jatropha Curcas.—BUGLOO, æt. 25, was admitted October 3, 1874, suffering from a large open abscess in the heel of the right foot, the result of an injury. He did not complain so much of the pain as of frequent hæmorrhage from the abscess. On removing the covering, hæmorrhage (evidently venous) at once occurred. On examination, there was found, immediately above the internal malleolus, a pulsating tumor, about the size of a pigeon's egg. Pressure on the posterior tibial artery at once arrested the bleeding; the superficial veins in the neighborhood were enlarged, and a faint thrill was detected in them; hence it was diagnosed to be a case of venous aneurysm. Pressure by the tourniquet or otherwise arrested the hæmorrhage temporarily; and, on the 12th, it was determined to make a trial with the milky juice of the jatropha, as advised by BABOO UDOY CHAND DUTT. A drachm of the fresh juice was then injected into the tumor by means of the hypodermic syringe, the nozzle of which was allowed to remain in the tumor for about ten minutes; and, on withdrawal, a single drop of blood escaped through the puncture; a small piece of dry lint and sticking-plaster were then applied. No ill effects followed. The result, however, so far as the tumor and hæmorrhage was concerned, is described as astonishing: in 20 minutes, the pulsation was so faint as hardly to be detected, and, by evening, all pulsation had ceased, and a good firm coagulum had formed. Four days subsequently, the patient left the hospital without permission, considering that there was no further need of his staying in hospital; three months afterwards, he was reported to be quite well. This is a single case, it is true, but it is very suggestive. DR. EVERS concludes his remarks by quoting a passage from HOLMES' System of Surgery (vol. iii, p. 512), as to the importance of the discovery of "a fluid of great coagulating power devoid of irritant properties," applicable to the treatment of aneurysms. Is such a fluid to be found in the fresh milky juice of jatropha curcas?

ANDROMEDA LESCHENAULTII.—The next plant to which I would call attention is one which, as far as I am aware, has no medicinal properties assigned to it by native practitioner, and yet it is probably destined to play an important part in the future of Indian materia medica, namely, Andromeda Leschenaultii D. C., Nat. Ord. Ericaceæ, growing in great abundance on the higher ranges of the Nilgherries. In 1867, MR. MCIVOR, of Ootacamund, requested MR. BROUGHTON, the Government quinologist, to examine an essential oil obtained by him from this plant, and it was pronounced by MR. B. to be identical in composition with the Canadian oil of wintergreen, Gaultheria procumbens, *Willd.;* but, as it was found to contain less of the peculiar hodrocarbon oil, which forms a natural and considerable constituent of the Canada oil, he was led to recognize it as somewhat superior in quality to the latter. This Andromeda oil, like its Canadian congener, is an impure salicylate of methyl; and MR. BROUGHTON, acting on his knowledge of the fact that methyl-salicylic acid would, under suitable treatment, yield carbolic acid, instituted a series of experiments which resulted in his preparing considerable quantities of pure carbolic acid, equal to the purest kind obtained from coal-tar. The cost of preparation was from five rupees to seven rupees per pound. MR. BROUGHTON, in the conclusion of his able report on this subject to the Madras Government (January, 1871), observes that the carbolic acid obtained from this source has certain advantages over the coal-tar acid, consequent on its extreme purity. It is less deliquescent, and cannot possibly be open to the suspicion of contamination with certain other products of coal-tar, which possess injurious qualities. It would not be advisable, he adds, to prepare carbolic acid from this source, when the comparative cost shows that the grain must be very small or non-existent; but it is well worthy of record that, should circumstances render the supply of the English product difficult, or uncertain, as in the case of war, or increased English price, a practically inexhaustible source exists in this country (India) from which this indispensable substance in its purest state can be obtained at a slight enhancement of the present price.

Interesting and important as this Andromeda oil is as a source of carbolic acid, it is even more so, as the probable source of another valuable therapeutic agent, namely salicylic acid, of which one of the recognized sources is the winter-green or gaultheria oil, which, as just

mentioned, is identical in composition with our present article. On this subject the following remarks of MR. MARTINDALE, in his very useful little work, The Extra Pharmacopœia (page 35), may not be out of place. "Commercially, the acid prepared from the oil of winter-green, the natural salicylic acid of MR. J. WILLIAMS, is the purest. Oil of winter-green is an impure salicylate of methyl. When treated with caustic potash solution, and the volatile matters distilled off, an impure salicylate of potash remains; this is decomposed by hydrochloric acid, and the salicylic acid obtained purified by dissolving, and crystallising finally from weak spirit. It is in crystals resembling those of strychnine, and larger than those prepared from carbolic acid." This process, applied to Andromedia oil, would, in all probability, yield similar results. It is to be hoped that the subject may soon be taken up by the medical authorities in India. In the meanwhile, it seems very desirable that the oil itself should be subjected to trials as a stimulant, carminative, and antiseptic.

HYDROCARPUS INEBRIANS.—Another oil to which I would direct attention is that obtained by expression from the seeds of hydrocarpus inebrians, *Vahl*, a tree, Nat. Ord. Bixiniæ, inhabiting the western coast of the Peninsula. It is the Neeradimootoo of Ainslie (Mat. Ind., vol. ii, p. 235). Botanically, it is closely allied to Gynocardia odorata, R. Brown, a tree belonging to the same natural order, inhabiting Northern and Eastern India and the Malayan Peninsula, the seeds of which yield chaulmoogra-oil, lately brought to notice as a remedy in leprosy and skin-diseases. It is in the same class of cases that our present article is most esteemed; indeed, in Travancore it holds a first place, in native opinion, as a remedy in leprosy, and one of the most intelligent native gentlemen I have ever met with (since deceased), himself suffering from leprosy, assured me that he had derived more temporary benefit from Neeradimootoo oil than from any other medicine. AINSLIE places the dose at half-a-teaspoonful twice daily; but it would probably be better to commence with a smaller dose, and increase it as the stomach will bear it, for he states that it is apt to nauseate a good deal at first. In Ceylon, where the tree is indigenous, the fruit is said to be used for intoxicating fish: hence probably its specific name.

SARACA INDICA.—I take advantage of this opportunity to mention another Indian drug, which, as far as I am aware, has not hitherto been subject to trials by any European practitioner in the East, but which has recently been brought specially to my notice by H. H. the Maharajah of Travancore, F.L.S., himself a most intelligent observer, namely, the bark of Saraca Indica, *Linn.*, the Jontsia Asoka of Roxburgh (Asok, *Hind.*, *Beng.*). He mentions the case of a recurring hæmorrhoidal tumor, in a member of his own family, in which it proved signally successful after European remedies had failed. In his letter, his Highness speaks of it as "specially useful in diseases of women connected with menstrual irregularities;" and he adds: "If you can bring this substance to the notice of the medical profession, you will be doing a real service." The only book in which I can find this drug noticed is Udoy Chand Dutt's Materia Medica of the Hindus (page 143), where it is stated that the bark is much used in uterine affections, especially in menorrhagia. It is to be hoped that trials will be made with it to test its alleged efficacy.

COSCINIUM FENESTRATUM.—Should it ever be desirable to introduce into European practice an elegant, cheap and efficient bitter tonic, I can testify from experience that such may be found in the woody stems of Coscinium fenestratum, *Colebrook*, a large menispermaceous climbing plant, inhabiting the forests of Malabar and Ceylon. It is met with in the bazaars of southern India under the Tamul name of *Mara Munjil*. It occurs in the form of cylindrical woody stems, of variable length, from one to four inches in diameter, of a bright greenish-yellow color, and pure bitter taste. Thirty years since, it was imported into England from Ceylon under the name of Calumba-wood, and, analysed by MR. PERRINS (Pharm. Journ., 1853, pp. 180, 500), was found to contain berberine. From my own trials with it at the Trevandrum Charity Hospital, I came to the conclusion that it was a good substitute for calumba, and efficient in all cases requiring a pure bitter tonic. It was prescribed in the form of infusion and tincture, of the same strength as the corresponding preparations of calumba.

PETROLEUM.—To the indigenous medical products of India, derived from the inorganic kingdom, comparatively little attention has been paid; yet some of them seem well worthy of notice. Foremost amongst these is petroleum, which is met with on the surface of certain lakes in Assam, Burmah, and in the volcanic islands on the Arracan coast. Passing over its alleged successful employment in beri-beri, chronic rheumatism, skin-diseases, etc., I would in this place, call especial attention to it as an efficient agent in antiseptic surgery. In this character it was first brought to notice by SIR JOSEPH FAYRER (Indian Medical Gazette, September, 1869), who, after trials with it in twenty cases, came to the conclusion that it possesses some, if not all of the advantages assigned to carbolic acid. He uses it pure, or diluted with equal parts of glycerin or oil; and he states that, whilst it certainly has some deodorizing power, it appears also to have that of limiting suppuration, and of restraining the development of septic miasmata in the discharges. It is to be hoped that SIR JOSEPH will increase the debt the profession already owes him by continuing his researches, and that others will follow in his wake. I would also venture to suggest that experiments should be made with the Indian petroleum, with the view of ascertaining whether, under suitable treatment, it will not yield vaseline of as pure a quality as that obtained from the American article. Should such prove to be the case, and if it could be manufactured at a small cost, the importance of the fact, in relation to the pharmacy and practical surgery of the East would be self-evident.

In conclusion, I will only name three in organic substances, with the chemical nature and medicinal properties of which it is very desirable to become better acquainted: 1.

Sendá-lón or sendé-nimak, the rock-salt of the bazaars; 2, Bit-loban or kala-nimak, literally black salt; and 3, Salajet or alum-earth of Nepal. These articles are held in high esteem by native practitioners, and are evidently possessed of no mean medicinal powers. Some particulars with regard to the two latter will be found in a paper by myself in the fourth volume of the Madras Quarterly Journal of Medicine (page 239); and others, especially in reference to rock-salt, are given in the Moodeen Sheriff's valuable Supplement to the Pharmacopœia of India (pp. 71, 216, 107, 354).

Should these crude suggestions lead to any practical result, the object in view will be fully attained.—EDWARD J. WARING, C.I.E., M.D., in *Brit. Med. Jour.*

THE ACTION OF FULL AND PODAL HOT BATHS ON THE EYE.—In the Vratch, Nos. 1 and 2, 1884, DR. J. N. KATZAUROFF, of Jaroslavl, describes the experiments with full and foot hot water baths, which he has undertaken, conjointly with DR. J. J. ORLOFF, to elucidate their action on the circulation in the eye and intra-ocular tension.

1. The action of full baths was studied (*a*) in fifteen subjects with normal eyes, thirteen of them being pupils of the local school for *feldshers* (assistant-surgeons), aged from 15 to 20; one shopman, aged 40; and a woman, aged 30. In each of the cases a bath at 31° R., of fifteen minutes' duration, was employed. The following changes in the eye were found. 1. In a majority of the cases (in 11 of 15) the discs became considerably paler, in consequence of collapse of their capillaries. 2. As often (in 11 of 15) the retinal arteries became contracted, and the veins dilated. 3. In 13 of 15 cases a more or less considerable decrease in intra-ocular tension was observed, the phenomenon being dependent upon sinking of the blood-pressure in the ocular vessels. In the two cases where intra-ocular tension remained unchanged, no change in the blood-pressure was noted. 4. Within 8 or 10 minutes after the bath, the discs regained their normal color, or even became somewhat rosier than they had been before the experiment; the change being always co-incident with an improvement of the pulse, and usually with dilatation of the ophthalmic arteries and rise of the intra-ocular tension.

(*b*) In two cases of glaucoma and in one of congested disc. In one of the glaucomatous cases, that of an anæmic, weak woman, aged 43, with pronounced atheromatous degeneration of the aorta, the hot bath produced both a marked depression in the cardiac action, and fall of the intra-ocular tension. In the other glaucomatous case, that of a man aged 60, with nothing abnormal in the heart or vessels, no change either in the arterial or in the intra-ocular tension was observed. In the case of congested discs, the hot bath markedly diminished œdematous swelling of the papilla, and increased the volume of the retinal arteries. From all the facts sketched above, DR. KATZAUROFF draws the general conclusion that "full hot baths in a majority of cases diminish the amount of blood in the posterior segment of the eye, but this diminution takes place only when the blood-tension is sinking, that is, only when the cardiac action is growing weaker."

Discussing the practical question whether "full hot baths may be used as a derivative means in cases of hyperæmia of the posterior segment of the eye," the author gives a negative answer, in view of the bath producing a weakening action on the heart. To obtain an actual diminution of congestion within the eye, it would sometimes be necessary to bring the patient almost to a fainting condition. Besides, the derivative influence of the bath, of this "double-edged weapon," is not constant.

2. Foot-bath.—As is well known, ophthalmologists attribute to podal hot baths a derivative action in regard to the eye, and, accordingly, recommend their employment in order to diminish ocular congestion. Thus, PROF. GUSTAV J. BRAUN, of Moscow, in his Handbook of Ophthalmic Diseases, advises the use podal hot baths, with addition of hydrochloric and nitric acid, in cases of posterior staphyloma. PROF. SZOKALSKI, in his Ophthalmology (translated into Russian by PROF. M. VOINOFF), regards the baths even as a powerful derivative, and explains their action by a simple determination of the blood to the legs. PROF. ED. MEYER, of Berlin, recommends the baths with mustard in neuroretinitis in anæmic subjects. PROF. ADAMUK, of Kazan, in his capital Practical Treatise on Ophthalmic Diseases (1881), administers daily hot podal baths, with mustard or nitric acid, in cases of myopia of progressive character, and so on. In short, a belief in the strong revulsive properties of the baths under consideration is rooted pretty firmly and extensively in the professional mind.

To verify this view, DRS. KATZAUROFF and ORLOFF examined the action of foot-baths in twelve subjects with normal eyes (again in feldshers) and in three patients with posterior staphyloma, myopic conus, etc. In the former group, a simple hot water bath, at 35° R., and of fifteen minutes' duration, was used. In the latter group there was added to hot water either potassa with mustard powder (one pound of each), or a mixture of strong hydrochloric and nitric acids (two ounces of each). The results obtained by the author were very remarkable and important in a practical sense. In none of the cases did the podal bath show the slightest derivative action; there was never found anything like the paleness of the pupil, or collapse of the retinal arteries, or decrease of the intra-ocular tension. On the contrary, in an overwhelming majority of cases there were present most distinct signs of increased congestion in the eye, such as reddening of the discs (14 cases), dilatation of the vessels (11), and rise of the tension (12), which phenomena were accompanied by an increased frequency of the pulse and a rise of the arterial tension (in 13 cases). All the changes remained still visible for 10 to 20 minutes after the bath. In other words, podal hot baths do not belong at all to the means for diminishing the amount of blood in the eye; on the contrary, its use in posterior staphyloma, iritis, retinitis, and optic neuritis would, as a rule, lead to an increase of hyperæmia. Hence, according to the author, arterial hyperæmia of the posterior segment of the eye is a contra-indication to the use of the bath. The latter could be used only in cases of venous congestion in presence of collapse of the retinal

arteries, where they would bring on resolution of stasis through stimulating the cardiac action. [That podal hot baths are far from being derivative in a simple mechanical sense, that they do not simply "allure the blood from the upper parts of the body to the fees," may be seen, also, from DR. SHOLKOVSKY'S researches, which will be found in the London Medical Record, Aug. 1882, p. 317.—Rep.]—*London Medical Record*, Jan. 15, 1886.

DUJARDIN-BEAUMETZ ON HYPNOTICS.—In a series of lectures entitled "Conference de Thérapeutiques," DUJARDIN-BEAUMETZ has taken up various therapeutical subjects. In a recent lecture, which appears in the Bulletin Général de Thérapeutique, for Oct. 30, 1885, he discourses on the "new hypnotics." We transcribe some of his observations:

Chloral appears to act on the heart, and, as has been affirmed by GUBLER, it is a heart poison in large doses. In all febrile diseases of a congestive form, chloral is far superior to opium for the production of sleep; as in typhoid pneumonia, and alcoholic delirium. On the contrary, this remedy is contra-indicated in cardiac affections, especially in troubles of the aortic orifice; here opium is much better. Chloral is a most useful remedy in certain forms of intoxication, especially in poisoning by strychnine, in delirium tremens, and uræmic convulsions, but in these it is still inferior to paraldehyde.

The sleep produced by paraldehyde is analogous to that produced by chloral. It is usually calm, but in some instances the sleep is preceded by excitement. The assertion of QUINQUAD and HENOCQUE that it acts on the hæmoglobin, producing methemoglobin, has been disproved by HAYEM, who has shown that it does not affect the coloring matter of the blood. It is eliminated almost entirely by the lungs, but when large doses are given some portion escapes in the sweat.

One of the most interesting facts regarding the action of paraldehyde, is its antagonism to strychnine, which was first demonstrated by the Italian physicians, and since confirmed by COUDRAY. DR. DUJARDIN-BEAUMETZ relates some experiments of his own proving this antagonism. Ether, chloral, chloroform, have similar powers in this respect. They all act, as does paraldehyde, on the cells of the nervous matter. We know that strychnine, also, stimulates the cells of the cerebro-spinal axis. It consequently happens that when the nerve elements are acted on by one agent, they will not receive an impression from another, and thus in a strictly physiological and scientific manner can be explained the antagonisms of these several remedies and strychnine.

Compared with chloral, paraldehyde has these advantages:

It is less irritant, and better supported by the stomach. It is not a heart poison. It is a more efficient antidote to strychnine. But it has less analgesic action, and less power to relieve pain than chloral, and hence when insomnia is caused by pain the latter is preferable, and morphine is still more efficient. In nervous insomnia, in that due to the abuse of alcoholic drinks, paraldehyde is much superior to chloral. Especially is paraldehyde most useful in the different forms of mental disorder, as DRS. KERAVAL and NERKAM have shown by numerous trials. They have also shown that it is a valuable hypnotic in certain cases of insomnia with the excitement occurring in the course of some cerebral affections, in the convulsive neuroses, and especially in epileptic crises, and in the multiform manifestations of hysteria. DR. DUJARDIN-BEAUMETZ has also treated many cases of morphiomania by paraldehyde, giving three or four grammes a day (forty-five to sixty minims). It does not appear to lose its effect by repetition, since the same results have been obtained through months of treatment.

MR. G. F. HODGSON, an English surgeon, has had experiences with paraldehyde which supplement the observations of DUJARDIN-BEAUMETZ (British Medical Journal, July, 1885). His report is based on the experience gained from the use of about two quarts of the agent in a variety of cases. MR. HODGSON finds it to be a hypnotic of great value, in that it produces sleep like the natural state, promptly and without any unpleasant after-effects. He regards it as the most appropriate hypnotic in the insomnia of gout, in mania, hypochondriasis, delirium tremens, migraine, and in the wakefulness of ordinary diseases. His prescription is as follows:

℞ Paraldehyde, ʒ j.
Spiritus chloroformi. ♏xv.
Pulv. tragacanth. comp., ʒ j.
Syrup aurantii, ʒ iv.
Aquam, ad ℥ iij.
M.

This dose is sufficient in the milder cases, but must be repeated in the more severe.—*Amer. Jour. Med. Sciences.*, Jan., 1886.

MEDICINAL SOAPS.*—The subject of soaps (Volkmann's Sammlung klinischer Vorträge, No. 252, 1885) has been lately receiving the attention of UNNA, of Hamburg. A basic soap of fixed composition, with which might be incorporated various medicinal substances, was prepared, consisting of sixteen parts best ox fat, two parts olive oil, six parts 38° Beaumé soda lye, and three parts Beaumé potash lye. This combination of the alkalies had the advantage of being less apt to blister the skin when medicinal substances are incorporated with the soap. The soap so made and composed is over-fatty—that is, possesses about four per cent. excess of fat over the amount necessary for complete saponification. In color it is yellowish-white, of waxy consistence, and permanent.

Although, theoretically, UNNA considers that beef fat alone is the most perfect fat for soap manufacture, an advantage seems gained by adding one proportion of olive oil to eight parts of beef fat. The objection to cocoanut oil, from which a soap can be made which produces a good lather, is, that after continued use the skin becomes harsh and dry. Neutral soaps if used habitually tend to produce roughness and harshness, the natural oiliness of the skin being

*Medicated soaps prepared after the most useful and convenient formulæ are now offered by American manufacturers (Parke, Davis & Co.), and form an admirable method of treating skin affections

too completely removed. Hence an excess of fat was found to add to the value of the soap, both for medicinal and toilet purposes.

For skins in which there is naturally a tendency to harshness and dryness, the soap was found exceedingly valuable; the skin after its use is smooth and pliable. This basic soap UNNA designates over-fatty basic soap (über fettete Grundseife).

For thinning down the horny layer in parakeratoses and in acne, an "over-fatty marble soap," made up of one part of the basic soap and an equal quantity of very finely-powdered marble, is highly spoken of. It is far superior to the pumice-stone and sand-soaps, inasmuch as it accomplishes the same purpose, and has the advantage of leaving the surface normally unctuous and smooth. Several other combinations are advised for special purposes. Thus "over-fatty ichthol soap" is especially valuable in rosacea. If the disease is mild in character, washing the parts with this soap and hot water two or three times daily is commended. If the soap lather is allowed to dry on, as is advisable in severe cases, a stronger effect is produced. The washing with this soap does not necessarily prevent other measures being carried out at the same time, using the soap during the day and pastes or salves, if desirable, at night. "Over-fatty salicylic acid soap," and other medicinal incorporations, are mentioned, and advised for the disorders for which the drugs are in other forms, as salves and lotions, often employed.—*Amer. Jour. Medical Sciences*, Jan., 1885.

SANTONIN IN AMENORRHŒA.—Believing that the re-establishment of the catamenia in cases of amenorrhœa with constitutional disease (especially chlorosis) is helpful in restoring the patient to health, and knowing also that general remedies may be some months in producing that result, I have tried santonin, as suggested by MR. WALTER WHITEHEAD (the Lancet, Sept. 5, 1885), viz: ten grains of santonin to be taken on two consecutive nights. I omitted, however, the morning saline purge, wishing to avoid possible sources of error. I have tried the drug in 20 cases of amenorrhœa, 13 of which were associated with anæmia or chlorosis, and failed completely in 17. In all, restlessness, yellow vision, and discolored urine followed the use of the drug. The following four cases were of interest:

Case 1.—HARRIET V——, æt 18; plethoric and epileptic; has never menstruated. Eight hours after taking first powder, violent colic with diarrhœa came on, with an unusually severe epileptic fit, during which the menstrual flow appeared, and continued painlessly for four days. She has not menstruated since (three months and a half), but has had one fit.

Case 2.—ALICE K——, æt. 19, chlorosis; has never menstruated; much ovarian tenderness; slight leucorrhœa. After the two powders a profuse leucorrhœal discharge ensued, lasting six days, with much uterine colic, but no catamenia. Patient is now quite well and regular, after two months and a half of treatment with iron, arsenic, salines, and aloetic purgation.

Case 3.—ANNIE B——, æt. 21; chlorosis; amenorrhœa three years. The powders produced no effect; potash, with kaolin in sufficient quantity, in form of pill, and taken three times a day after meals, brought on the flow after taking 12 pills. Patient is now nearly cured with the usual remedies.

Case 4.—MARY E. R——, æt. 24; quite healthy; catamenia overdue eight days, though usually regular, and patient is to be married in six days. Catamenia came on during the night after one powder, and for the first time in her life painlessly, lasting the usual four days.

Remarks.—My 20 cases seem to indicate that santonin, as a direct emmenagogue, is useless in amenorrhœa associated with chlorosis, in which cases I have often found permanganate of potash useful. In healthy, full-blooded women, santonin seems to have some power in starting the uterine flow, and apparently without causing much pain. Its mode of action, however, is quite unknown in this respect, and it seems not likely therefore to be much employed in gynæcological therapeutics.—AMAND ROUTH, M. D., B. S., M. R. C. P., in *London Lancet*, Jan. 9, 1886.

GRINDELIA ROBUSTA: EXPERIMENTS TO ASCERTAIN ITS PHYSIOLOGICAL ACTION—.DR. JOHN A. BUFFINGTON, in a thesis for the Doctorate which received the "Lea Prize," relates an elaborate investigation made in the laboratory of experimental therapeutics of the Jefferson Medical College, under the supervision of DR. A. P. BRUBAKER, Demonstrator. We give a summary of the conclusions arrived at by DR. BUFFINGTON:

Grindelia was found to be not actively toxic. The lethal dose of the fluid extract, the preparation used in the experiments, ʒ ij–ʒ iij for rabbits weighing twenty-eight ounces to thirty-two ounces; and ɱx–ɱxv for frogs weighing one ounce; and the time required to cause death was one to three hours in the former, and a half to one in the latter.

Grindelia first lessens, then destroys sensibility, the action beginning in the peripheral—the end-organs—then involving the trunk of the nerves, and ultimately the spinal cord. Motility is affected in the same order, the paralysis beginning in the nerve terminals, then involving the nerve-trunks, and finally the motor centres in the spinal cord.

The heart is slowed because of an increase of inhibition due to stimulation of the cardiac inhibiting centre, and the blood-pressure is raised, chiefly by stimulation of the vasomotor centre in the medulla. The respiration is increased in frequency by an action of the agent on the respiratory centre, and, also, on the terminals of the pneumogastric in the lungs. Toward the end, the respiration becomes slower, and is jerky in character, and death ensues by arrest of the respiration, the heart continuing in action some time longer.

The cerebral effects of grindelia are quite pronounced. A condition of narcosis, more or less profound, ensues, as the effects of the drug develop. This action appears to be due to a direct impression made on the cells of the cerebral lobes.

A marked increase of the urinary secretion was noted in all the animals experimented on. As some constituents of the drug appear in the urine [the resin ?], a direct action on the renal structures may be admitted. The increase in the blood pressure is another factor—and, it may be, the chief one.

This investigation throws light on the nature of the curative effects exerted by grindelia in asthma, for the relief of which, hitherto, it has been chiefly used. The cerebral, the cardiac, and the renal actions, however, suggest its use in other maladies.—*Amer. Jour. Med. Sciences*, January, 1886.

THE NEW SIGN OF PREGNANCY.—This sign, first described by HEGAR, consists in a change in consistence of the lower segment of the uterus, by which it becomes very yielding and compressible, characters which make it easily distinguishable from the thick and firm cervix. This change is most distinct at the middle portion of the lower segment of the uterus, especially in the median line, the sides being much firmer and resisting.

COMPES (Berliner klinische Wochenschrift, Sept. 21, 1885) publishes the results of observations made to verify the above sign, and has formed a high opinion of its value for diagnosis. The examination is made in the following way: The thumb is introduced per vaginam till it reaches the portio vaginalis, and the index finger per rectum till it gets past the sacro-uterine ligaments which correspond to the level at which the cervix joins the lower uterine segment (this procedure is sometimes facilitated by previously washing out the rectum). The disengaged hand is then placed on the abdomen immediately above the symphysis, and pressed down toward the index finger (in the rectum), which is pushed forwards and explores the cervix, lower uterine segment (in all its portions), and, lastly, the higher parts of the uterus. The examination is facilitated by drawing down the portio vaginalis with a pair of forceps.

COMPES looks upon this sign as a positive one of great value, utilizable at all periods of pregnancy, even as early as the second month, when other signs are so unreliable. He never met with it except during pregnancy, and believes the increased compressibility of the lower segment of the uterus (forming as it does, the thinnest part of that organ) to be due to an infiltrated and succulent condition consequent upon pregnancy, and that the uterine contents can be pushed into its lower uterine segment in consequence of the increased elasticity of the wall of the upper segment of the uterus. It is, moreover, an almost certain sign of pregnancy, occurring, as far as is known, in but one other condition (retroversio uteri), and in that it is comparatively little developed. In only one of the cases of pregnancy which COMPES examined was this sign absent. He once found it so strongly developed (a fifth month pregnancy), and so great was the laxity of the anterior uterine wall, that it was impossible to take up a fold of that wall and grasp it between two fingers.—*Amer. Jour. Medical Sciences*, Jan., 1886.

MORE ABOUT THE NEW ODORLESS ANTISEPTIC IODOL.—Few practitioners now remember the name "DIPPEL," and yet JOHANN CONRAD DIPPEL'S name was once very familiar to pharmaciens, and may soon be so again. Our "elixir of vitriol" owes its origin to "DIPPEL'S acid elixir," of which it is a slight modification, and he discovered Prussian blue and "animal oil," all of which he described in his "Fatum Fatuum" in 1710. "DIPPEL'S animal oil" was once a favorite antispasmodic, and was employed in epilepsy by BOERHAAVE, JUNCKER, and HOFFMANN. ALIBERT, after experimenting with it in the hospital of St. Louis, declared it prolonged the interval between the fits, but it did not lessen their violence. Finally this oil, obtained in the processes of manufacturing ammoniacal products from bones, horns, etc., became a waste product, and with a full knowledge of the wonderful change modern chemistry is capable of producing in by-products, few persons would think it at all probable that the dark, greasy, foul-smelling fluid would be made to yield an odorless and valuable antiseptic, possessing the good properties of iodoform without its very unpleasant smell.

Iodol, like iodoform, is an iodine substitution product, and is thus described by DR. VULPIUS (Chem. Zeit., 9, 1446). Iodol has no unpleasant smell, and does not produce the same symptoms of intoxication as iodoform when wounds are dressed with it. It is a micro-crystalline brownish powder, which can be heated to 100 deg. without decomposition: at higher temperature it gives off iodine vapors, and finally yields a voluminous carbonaceous mass. Iodol is readily soluble in ether, chloroform, and alcohol, but the addition of water to its alcoholic solution produces a copious precipitate. It can, however, be diluted with glycerin. Iodol can be recognized by the green color of its solution in sulphuric acid, and by the bright red color produced when its alcoholic solution is warmed with nitric acid. For chancres the the direct application of the powdered iodol has been found most useful. It has been extensively used in the Royal Surgical Institute, Rome, in the treatment of open buboes and indolent ulcers, and has been found very valuable.—*Med. Press.*

THE SPECIFIC ACTION OF PICHI ON THE URINARY APPARATUS.—An account is given in the Independencia Medica of a Chilian coniferous plant, the Fabiana Imbricata of Ruiz and Pavón, but called by the natives Pichi. It has, according to them, great powers of controlling almost all diseases of the urinary organs, and is even considered to be capable of causing calculi to dissolve. A study has been recently made both of its chemical and therapeutic properties. It has been found to contain an aromatic essential oil, a resin and a crystalline substance of a highly fluorescent appearance, which is soluble in ether and in alcohol at 80° C., and very slightly in cold water, but sufficiently so to produce a solution which appears of a magnificent blue color when seen by transmitted light, but is yellow when seen by reflected light. The therapeutic action of pichi is most marked in cases of vesical catarrh caused by uric acid diathesis, gravel, or calculi. Here it diminishes the secretion and allays the irritability of the mucous membrane, thus allowing the gravel a better opportunity of passing with the urine. It has also a diuretic action, which has been found valuable in many cases of icterus, dropsy, and dyspepsia, due to the deficient action of the liver. In these cases the preparation employed was the essential oil, which, being absorbed and taken

into the circulation, acted as a stimulant of the secretory organs in general. The specific action of the drug, however, is evidently exercised on the urinary apparatus. The writer of the paper from which we quote prefers to use a fluid extract of the plant, of which he gives from two to three ounces daily, dissolved in water, either hot or cold.—*London Lancet.*

BOLDO-GLUCINE, OR THE GLUCOSIDE OF BOLDO, AS A NARCOTIC.—In the Paris Médical, Nov. 21, 1885, it is observed that much has been written on boldo, but no generally admitted conclusions have been forthcoming. The tincture of boldo was used, as well as the wine; when subsequently boldine, an alkaloid, was isolated by VERNE and BOURGUIN. In 1884, M. CHAPOTEAUT extracted from this plant another substance, which, when submitted to reagents, behaved as a glucoside. It was first tested on dogs, and afterwards on patients in M. MAGNAN'S ward; doses of two, four, six, and eight grammes were given in draughts, capsules, or in rectal injections. Boldo is a powerful narcotic, without any attendant disagreeable results. A patient of M. MAGNAN'S, at Saint-Anne's Asylum, who suffered from hallucination and passed sleepless nights in a great state of distress and excitement, produced by imaginary tormentors, slept soundly when she took two grammes of boldo. This was discontinued during a period of 10 days, and her old sufferings returned; she implored to have the capsules given to her again, and she then passed tranquil nights. Dr JURANVILLE, in a short memoir on boldo, describes 10 similar cases. This substance is a hypnotic agent producing sleep, similar to natural sleep; there is an absence of anæsthesia; the respiration is normal; less carbonic acid is exhaled than when awake; the brain is also less congested than during waking hours. Administered to insane patients, boldo produces sleep in patients who had been worried by insomnia.

THE THERAPEUTIC APPLICATION OF NITROGLYCERIN.—Nitro glycerin has steadily made its way to the front, and has now an assured position as a therapeutic agent. Quite recently, BURZHINISKI has published a valuable paper on its action in nephritis, showing that under its influence the urinary albumen eliminated by the kidneys is diminished, whilst the quantity of urine is increased. ROSSBACH examined the action of nitro-glycerin, nitrite of amyl, and the nitrates of potassium and sodium, and gave a decided preference to nitroglycerin, speaking of it as an "excellent remedy" in interstitial nephritis, and one "calculated to prolong life." Its power of dilating the blood-vessels is so marked, that it is now used in the treatment not only of angina pectoris, asthma, and Bright's disease, but for warding off shocks in all forms. In America it has been proposed as a substitute for alcohol. —*Brit. Med. Journal.*

COMPARISON OF PACKING AND HOT BATHS IN THE TREATMENT OF NEURITIS.—A considerable number of observations have been made by DR. GESS, of St. Petersburg, with the object of determining the relative effects of wet-packing and hot-air and hot-water baths as diaphoretic agents in the treatment of nephritis. He finds that the temperature is raised by all these methods of treatment, the greatest elevation being produced by the hot-water baths and the least by the packs. The effect of the packs, too, is more transient, as twenty minutes afterwards the temperature falls, whereas it remains high for fully an hour after the hot-water baths. The same difference is observed in the increase of the pulse and respiration by the three methods of treatment. The diaphoretic action appeared to follow the same law, being greatest after hot-water baths and least after packing; the effects of hot-air baths appearing, as in the foregoing cases, to be intermediate between the hot-air baths and the packs. He therefore thinks that hot-water baths offer a mode of treatment preferable to the others.—*London Lancet.*

MENTHOL AND CHLORAL CONES.—M. MAYER, in a recent communication to the Paris Therapeutical Society (Revue de Thérapeutique, October, 1885), says he has found a mixture of oil of peppermint and ether a good local application for the relief of superficial pains. He proposes, also, the following cones for topical use:

Chloral.....	gr. 0.50
Menthol.....	" 0.50
Cocao-butter.....	" 1
Spermaceti.....	" 2

These are held by a compress against the painful part.

BOWDICHIA MAJOR.—At a meeting of the Therapeutical Society of Paris, M. PETIT read a communication concerning a new alkaloid which he had abstracted from the bark of a shrub used in Brazil in the treatment of fevers and of rheumatic and gouty pains. This bark comes in hard, thick fragments of an ochre-yellow color, has a bitter taste, and resembles somewhat yellow cinchona bark. It is taken from a leguminous plant called Bowdichia major, and known by the natives under the name of sebipira guacu, or sucupira. The alkaloid is said to possess narcotic and mydriatic properties.—*Med. and Surg. Reporter.*

A NEW DRESSING FOR WOUNDS.—The Paris correspondent of the British Medical Journal, Dec. 12th, says that a new article for dressing wounds, called Berthault's taffetas, has just been brought out, which is considered to be superior to the adhesive plasters hitherto used. It is as transparent as glass, and as thin as the skin of an onion; the condition of the surface covered by it is as easily seen as though it were uncovered. This plaster is as elastic as India-rubber; it cannot be traversed by fluids, and is unaffected by change of temperature. Chemically it is inert; neither changed by acids, alkalies, nor the secretions of the human organism.

The Medical Age.

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Original Articles.

CLINICAL LECTURE.*

BY PROFESSOR ROBERTS BARTHOLOW, M. D., OF PHILADELPHIA.

MELANCHOLIA.

The first case which I shall show you, gentlemen, is a case of melancholy in a male. You seldom hear these cases lectured about, yet you will frequently meet them when you get in practice. As a rule, a case of melancholia is not considered to call for any special treatment beyond a change of surroundings, unless it be a very severe case, when the patient is considered a fit subject for an asylum. But this is a grave error, for in very many cases the disease is physical in its nature, or at least the disordered cerebration depends upon physical causes, and we can do much, with the drugs at our command, to relieve a condition that serves to make life a burden. Fix this point in your minds and do not dismiss the cases of melancholia that come to you, merely with words of advice.

Well, this man, several years ago had typhoid fever, after which this melancholic condition set in. It is characterized by depression, not only of the mental functions, but of the physical as well. He seems unable to appreciate his surroundings; he does not "take in" what is going on about him. His memory is defective in reference to recent events, no doubt due to his want of appreciation of their occurrence, while he will remember that which has happened in by-gone years. He is dazed, confused, his mental operations are in abeyance, he is leading, as it were, a vegetable existence. I note that his circulation is sluggish. He has no illusions or hallucinations, but merely a loss of memory. Masturbation and excessive venery have been set down frequently as the cause of this condition, but my observation leads me to believe that they should rather be considered as effects than causes. We will often find these habits developed as a result of melancholia, more especially in women and among men who are afflicted with an hysterical temperament; under such conditions you will sometimes find the most delicate and refined women will become nymphomaniac. In this case there is a history of masturbation, the habit having been contracted after the advent of the melancholia, and I am glad to say that the patient possesses sufficient strength of character to have enabled him to abandon the pernicious habit. I do not believe, therefore, that masturbation has been a factor in the causation of the condition. Now, what shall we do to relieve this man? I tell you that he is generally depressed, mentally and physically, his circulation is languid, though he looked well when he entered the room, which is only another point going to show the deranged and unstrung condition of his nervous system. His vaso-motor system is so unbalanced that it flies from one extreme to the other, instead of maintaining that happy, even and healthy equlibrium. When he came into the room, under the influence of excitement, his vaso-motor nerves were in a condition of greater or lesser paresis, which allowed dilatation of the blood-vessels and gave to his cheeks a ruddy hue, counterfeiting the rosiness of health; but in repose, as you now observe, when he has recovered from the excitement of coming before you, his face is pallid; the heart's action is slow and languid. To do good we must direct our attention towards accelerating this sluggish performance of his functions. It is of paramount importance that we pay attention to his diet, and that we so invigorate the abdominal organs of digestion that when the food has been taken in it will be properly digested, prepared to nourish the system and fairly assimilated; we must stir up the dormant pancreas and liver. Next to this point, we must give our attention to the bowels, the contents of which we must keep in a soluble condition and have regularly removed, not, however, purging the patient. Now, this man is not physically active, if you catch my idea; on the contrary, he is physically torpid. There is no hyper-excitability of the motor areas; on the contrary, there is decided depression of these important areas. Our drugs must therefore be aimed at counteracting this depression, and for such a purpose we have admirable remedies in strychnine and nux vomica. Now, to act more directly on his nervous depression, I will give this man ten minims of tincture of nux vomica thrice daily. To keep the bowels regular and their contents soluble, he will take:

* Delivered in the Hospital of the Jefferson Medical College, February 4th.

℞ Magnesii sulph., ʒ i.
Ferri sulph., gr. iii.
Manganesii sulph., gr. iii.
M.

S.—Take in half a tumbler of cold water before breakfast.

The dose of nux vomica will be gradually raised to fifteen minims, and this will stimulate the motor areas; it will raise him out of his vegetative existence, as it were, and will excite to greater activity the animal functions.

MELANCHOLIA WITH DELUSIONS.

Here is a case very similar to the one that has just been before us, but it differs from it in that with the melancholia this man has associated delusions; he hears voices and has morbid fears. He imagines that burglars are trying to enter his house, and thinks he hears great uproars. Now why do I say that this man has delusions? Why do I not call them hallucinations? Because there is a vast difference between these conditions, and one that you should recognize and remember. Let me impress it upon you. This man has an hallucination of hearing, when he imagines that burglars are trying to enter his house, but, and mark this point well, for herein lies the difference between the two conditions, he is unable to convince himself by reasoning that this is an hallucination, and it therefore becomes a delusion. Note that this erroneous idea is conjured up without any foundation. If he were walking on the street and imagined that those whom he met were about to do him bodily harm, it would be an illusion, for he would have then some foundation for the idea in the presence of the people; his disordered cerebration would be merely misconstruing their motives and purposes, while in delusions the mind not only misconstrues, but it conjures up persons, and in addition, as I have said, the weakened reason is powerless to correct these erroneous and unfounded conceptions. If he could say to himself, "there is no one at the door; I only imagine that burglars are trying to get in," and if he could so convince himself, he would not have a delusion, but only an hallucination. It is of the utmost importance that you should clearly comprehend this distinction, for you may be called as an expert witness in court, and this distinction assumes a great medico-legal importance, when we realize that a person who has delusions is considered by the law to be of unsound mind or insane, while he who has only hallucination is regarded as sane.

Now look at this man's head and face; you see there clearly outlined the evidences of a deficient intellect. His education has consisted in learning how to read and write, but his natural intelligence has been of too low a type for it to go any farther. I do not claim that you can judge of the amount of a man's intelligence from the size of his head, for I do not believe it. The old saying, "Big head, big wit; little head not a bit," is not based on sound premises, for the size of the head has no relation to the amount of intelligence therein contained, which is rather determined by the nature of the brain, the number, depth and variety of the convolutions. Remember that BYRON'S head, wherein grew such beautiful poetic thoughts, was the smallest head in a whole regiment of men, while NAPOLEON, who was, next to JULIUS CÆSAR, the greatest general the world has ever seen had a small head. But while we cannot accurately measure the intellect, we can by scrutinizing the head and face form some estimate of the brain within. When, therefore, we look at this man's small head, retreating forehead, dull countenance, expressionless eyes, heavy mouth and general aspect of stupid animality, we observe a conformation of what we have elicited in his history in reference to his inferior intellect. In the first case we have good reason to expect that our therapeutic procedures will be productive of very much good, but our prognosis in this case will be much less sanguine on account of the natural intellectual defects that exist. But it is our duty to make an effort to relieve this condition, which is not only a source of terror to the patient himself, but may also prove, at some time, to be a source of menace and danger to those around him, as when he may undertake to resent, with violence, some imaginary injury done or about to be done to him. Our remedies must be such as will have an effect on the brain opposed to that condition which is its normal state. The mind is depressed. Cannabis indica has an exalting effect on the brain, hence it may cause a cessation of these delusions, or if it does not have that effect, it may substitute for the depressing and terrorizing delusions, those of an exalted, joyous and happy type. We will, therefore, give this man ten minims of the tincture of cannabis indica twice daily, and we will regulate his diet and bowels as we did in the former case.

EMBOLUS—POST-HEMIPLEGIC CHOREA.

Here is another brain case and I want you to note particularly how this man walks as he progresses around the room. I have frequently spoken to you of the physiognomy of disease and I want to impress upon you the great importance of noticing these usually considered trifling points, that will aid you so greatly in arriving at a diagnosis. To the ordinary eye nothing unusual would be remarked in the man's gait, or at most it would only be said that he had a *peculiar walk*, but to my eye and to yours, if you have pondered on my words, there is something extremely significant in his movements. He seems to have some

difficulty in lifting the right foot from the floor, in projecting the right leg, and, indeed, the whole right half of the body seems to lag behind, as it were. That this peculiarity is not imaginary, but very real, the history of the case, which I am about to give you, will make very evident. Notice now, also, the corners of his mouth, the labio-nasal fold, how it is drawn down on one side, look at the eyes, look closely and see what a marked difference there is between the two sides of the face. Now, when I ask him to protrude his tongue, you notice how it trembles and how decidedly the point goes over towards the right. When he is told to extend his arm at full length and, flexing it, brings his forefinger to the tip of his nose, you see he can do so readily with the left, but when he tries it with the right, the movement is very hesitating, uncertain and bungling. Now we come to his history: Three years ago, while walking on the street, he was suddenly seized with an attack in which he fell to the ground and was unable to rise. He says that he did not lose consciousness, but I am inclined to think there was a temporary loss. He was carried home and it was found that he had lost all power in his right side. He gradually regained this power, but ever since he will have, now and then, seizures, when there will be sickness at the stomach, with prickling and numb sensations in the right side. At the time of the first attack he was completely aphasic for a while, but he subsequently regained the power of speech. Now, however, he will occasionally halt for words, and will make mistakes in talking; he is not now truly aphasic, but his power of speech is not perfect. His defect of speech I would attribute partly to the original lesion, and partly to the paresis of the tongue, for you must remember that we have two forms of aphasia, the one *amnesic*, where there is a loss of memory of words, and the other *ataxic* aphasia, where there is no loss of memory, but an inability to clearly articulate the desired word, owing to the paretic condition of the muscles of articulation. In this case, as I have said, there seems to be a combination of the two conditions. These attacks of sick stomach and numbness he has every two or three weeks. When he holds out his arm, you see how it trembles and with what difficulty he maintains its equilibrium. He has choreic movements, and this is really a case of post-hemiplegic chorea. It has not yet advanced very far, but these movements are significant, and when it has reached its full maturity these movements will be very marked. Now let us ask, what is the local condition causing this trouble, what was the nature of the original seizure, and what is the nature of these periodical attacks? As to the original attack, was it caused by cerebral hemorrhage? If so, it must have been very limited, for, in a few hours he re-acquired the use of the paralyzed muscles. So also, if a hemorrhage, it must have occurred from an artery that was not a terminal artery, but from one that had free anastomoses. Let me call your attention to the admirable and practical distinction that COHNHEIM makes between terminal arteries and those that have free anastomoses. If a terminal artery ruptures, the circulation to the part that was supplied by it must be re-established through the medium of the capillaries alone, and this process is not only slow, but is likewise attended with more or less engorgement and congestion, which is very likely to be followed by permanent lesion and interference with the function of the part. If, on the other hand, the ruptures occur in an artery that has free anastomoses, the circulation in the part that has been temporarily deprived of its blood is rapidly restored without any congestion or derangement, and the part is enabled to regain its function rapidly and completely. Thus you can see that it makes an immense difference as to the future, whether the rupture has occurred in a terminal artery or not. But, unfortunately, we have no means of determining this fact positively antemortem, and can only infer such or the other to be the case from the rapidity or slowness with which the suspended function has been restored. In this case I think we must conclude that there has been either a hemorrhage from some vessel that had free anastomoses, or that there was an embolus washed into and blocking up the vessel supplying the part, and since there was aphasia, we must needs locate the lesion near the third left frontal convolution, where resides the centre that presides over articulate speech. Now, as to these periodical attacks, they are often caused by cerebral congestion. I fear that the mischief started at the time of the original seizure is slowly progressing, and that every now and again a congestion of this area causes an aggravation of the symptoms, accompanied by sick stomach. It is revealed to us by ophthalmoscopical examination that there is an embolus of the central vein of the retina, but this does not necessarily imply an embolus within the brain itself. These recurring attacks, I fear, indicate more or less permanence of the original lesion.

Have we any remedy that will benefit this man? In such cases, when we get out of the sphere of specific remedies, we are considerably at sea. Such attacks are not infrequently caused by syphilis, and in those instances we can usually do considerable by specific remedies, but when this cause is not present, the prognosis must be gloomy. Then our only hope can be through individual therapeutics; we can do nothing directly.

I have no doubt that during the years that

this man has been an invalid, he has had specific treatment, but it has been, apparently, without avail. It would therefore be idle to go over the use of mercury and iodide of potassium. The treatment and future of this case is very problematical. I will venture to give him, guided by the tremulous condition of his muscles, a remedy that is calculated to combat this condition. I will give him five minims of the tincture of physostigma, twice daily, and if I note any benefit from its use, I will persist in that line of treatment.

SCIATICA—DEEP INJECTIONS OF CHLOROFORM.

Here I have two cases of sciatica that have resisted all treatment, and such cases as you will frequently encounter, for of all diseases that afflict humanity, very few are as obstinate as sciatica. These are old cases. Now, in order that you may intelligently treat this disease and cure your case, it is very important that you should, wherever it is practicable, ascertain the cause. It may be a true neuralgia, or it may be rheumatic in character; it may be a nerve pain as a symptom of rheumatism; it may be really a neuritis, it may be caused by pressure, or, finally, it may be reflex. To which of these categories it belongs, you should endeavor to ascertain. Suppose we have a patient with a rheumatic constitution, the presumption would be that the sciatica was rheumatic, and in this form I have frequently derived marvelous results from the use of the salicylates, especially the salicylate of lithia. If it be neuralgic in character, the greatest benefit is to be expected from hypodermic injections of morphine. I have cured cases of great severity and obstinacy with galvanism, preferably the stabile current. Old cases will bear a very strong current, the older the stronger. Now, in these two cases, I propose to resort to deep injections of chloroform directly over the sciatic nerve, for I have, in very many cases, had most satisfactory results from this procedure. I pass the needle of the hypodermic syringe deeply near the nerve and inject ten minims. Before introducing the syringe I press firmly on the nerve, as you see, to locate it, for when I press on the painful part the patient winces, and thus I am sure that I am about to introduce the needle at the right place. Now, as I press deeply, the muscles, responding to the stimulus, contract and render the parts tense. When I have inserted the needle, I take the precaution not to inject at once, but to withdraw the point a little, and move it about, so that in case I have punctured a vein the point will be disengaged from it and I will not inject chloroform directly therein. When I remove the needle, I do so quickly, and make pressure with my fingers on the orifice so that the chloroform will not escape on the skin where it is broken. In one of these cases we have lumbago and sciatica combined, which is a combination that we often note. We will frequently have a history where lumbago, affecting both sides, has been the commencement, from which point the pain will shoot down the sciatic nerve, where it will become finally localized and remain. Such cases are usually rheumatic, and will be greatly benefitted by salicylate of lithia. This man says that his pain is usually worse at night, and such is the history we often get in rheumatism and neuralgia; you know what this means, nocturnal pain or nocturnal exacerbations are usually due to a specific cause. I do not know whether this man has had syphilis, but I do know that he has had large doses of iodide of potassium, but that in spite of this his sciatica has persisted. I have seen cases of sciatica, where the pain has commenced in the heel, remaining in that locality for two or three weeks and then extending up to the sciatic; in such cases we have a true neuritis, commencing at the periphery and extending up along the course of the nerve. In obstinate cases of sciatica there is usually some wasting of the affected limb. Constipation may cause sciatica, by the pressure from a loaded bowel. In all cases galvanism will do good, and when there is neuritis small blisters will prove serviceable.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, Feb. 1, 1886.

The President, C. T. PARKES, M. D., in the chair.

DR. J. SUYDAM KNOX read a paper entitled

QUINSY AS A RHEUMATISM.

The author reported the treatment of fifty cases of the disease. In forty-five cases (95 per cent.) there was a positive rheumatic diathesis. Forty of these cases were cured in thirty-six to seventy-two hours, without suppuration. The treatment was salicylate of sodium, and hot alkaline gargles, or the repeated insufflation on the tonsils of bicarbonate of soda. Five cases, decidedly rheumatic, where not benefited by similar treatment. Five cases, not rheumatic, were not benefited, and at the end of forty-eight hours the ordinary treatment of quinsy was followed. Only one of these cases did not suppurate. The doctor concludes that a large majority of quinsies are rheumatic inflammations: 1. From the percentage observed. 2. From the success of anti-rheumatic treatment. 3. From the similarity between the symptoms of quinsy and rheumatism.

DR. KNOX said that wherever possible he used an insufflator and blew bicarbonate of soda directly on the tonsils, using as much as

30 grains, and allowing it to remain on the tonsils as long as possible, to be followed by a gargle of water as hot as could be borne and to be continued until the throat was cleared, which would take from half an hour to two hours. He sometimes used carbolized lime water, with morphine.

DR. J. S. KNOX said that he could not say as to every case, but that where suppuration takes place it is usually in the gland, an abscess is formed from glandular inflammation and suppuration takes place through the gland.

DR. A. B. STRONG reported

A CASE OF INTUBATION OF THE LARYNX FOR ACUTE CATARRHAL LARYNGITIS, WITH RECOVERY.

He said the patient was a child, æt. 2½ years delicate and small for her age. She had been sick thirty-six hours when it was decided that intubation was imperatively demanded, and it was done. Instant relief was obtained. The act of introducing a No. 3 tube had caused such an abundant ejection of the mucus, and the breathing was so easy, that the tube was withdrawn, and the child passed the night comfortably. However, at 4 p.m. of the succeeding day, the tube was re-introduced with the same success, but about twelve hours after the child caught hold of the thread and withdrew the tube. The No. 2 tube was then placed in position and remained there sixty-eight hours, when recovery was complete. DR. STRONG said tubing the larynx has advantages over tracheotomy in being quickly performed, furnishing instant relief without cutting or bloodshed, being free from danger, and readily assented to by the parents. The care of the patient after operation is slight, as compared with tracheotomy, as the tube does not have to be interfered with, nor does it often clog up. The tubes as now made, those of DR. O'DWYER, are not easily coughed up. It is easier to introduce than remove the tube, owing to the fact that if the thread is left in the mouth it causes coughing and difficulty in swallowing. It was observed that during the thirteen hours the child wore the tube with the thread she had more difficulty in swallowing than subsequently when the thread was withdrawn; the thread being drawn across the epiglottis probably interferes with it closing the glottis during deglutition. Besides, the thread requires constant watching lest the child grasp it and withdraw the tube. Still, in case a mass of mucus should lodge against the lower end of the tube and stop respiration, the thread might be the means of saving the child's life by allowing the tube to be speedily withdrawn.

The president said it was a matter of surprise to him that so small an opening would allow the exit of secretions, as in the case just reported. It had been his experience that recovery always follows cases of catarrhal laryngitis. However, in these cases, he thought the introduction of the tube might be of great benefit in relieving difficult breathing or dyspnœa, and in allaying the fears of friends. He was aware that a small opening gave air sufficient for inspiration for some hours. He once operated on a boy about five years old in whom the trachea by improper manipulation was turned in some way, and the incision made in the side of the trachea. When the external tracheotomy tube was introduced into the wound the child breathed quite well, the suffusion of the face passed away and the lips became red, but still the sound of the breathing was not satisfactory to the ear. He then tried to introduce the internal tube and found the child had a return of all the symptoms of suffocation. On removing the external tube at at the bottom of the wound the trachea was seen unopened. The child recovered.

The President said that while the tube was in this bad posltion he looked into it through the fenestra, and at the bottom of the fenestra was an opening through which the smallest probe could be introduced into the trachea, which enabled the child to inspire air enough to relieve the urgent symptoms. He though that in a case of true diphtheritic laryngitis an opening of the size of the tube under discussion could, in his opinion, not give exit to any such amount of secretion as is frequently seen during an operation. He did not think that intubation of the larynx would take the place of tracheotomy; it no doubt is of great benefit in those cases where the patient is likely to die unless some measure be quickly adopted which will give time enough to allow the operation of tracheotomy. In the case under discussion, the tube was worn sixty-eight hours continuously. He had not seen a case of tracheotomy where the closure of the fenestra gave evidence that the trouble with the larynx or glottis was overcome in less than six days. This was the shortest time in which he had been able to remove the tracheotomy tube.

DR. F. E. WAXHAM said that from his experience with intubation of the larynx he was thoroughly convinced of its utility, and its superiority over tracheotomy. He had eight recoveries out of his first seventeen cases, a result which he claimed could not be approached by tracheotomy, especially in Chicago. The ages of the patients varied from eleven months to five years; he considered these eight cases as being saved from certain death, as in only one case would tracheotomy have been permitted by the friends, and he had the corroborative evidence of other physicians as to the impending danger, and the urgent necessity of surgical interference. Since his last report he had had a number of cases, and had performed the

operation four times during the last week, one patient being only eleven months old, suffering from both laryngeal and pharyngeal diphtheria; the urgent symptoms were at once relieved. In another case aged eighteen months, where death was impending, the tube was introduced without difficulty and the child relieved, and recovery would without doubt have been the result had not the child died of pneumonia on the second day. In another case, one of malignant diphtheria in a child of two years, the patient succumbed on the second day after the operation. In another case he found the patient cold and livid, pulseless, and unconscious. After the tube was introduced cold water was dashed on the child's face, and in about five minutes he looked around and asked for his father; took some milk and passed into a quiet sleep. This child died from pneumonia three hours later. DR. WAXHAM said that in the eight cases that recovered, in every instance false membrane was observed; when the tube was introduced the membrane was ejected, either in large flakes or broken-down masses. He recommended that in treatment after intubation nothing at all irritating should be given, as when a child takes fluid of any kind a few drops will trickle into the trachea and cause violent coughing, and this irritation will often lead to pneumonia. In a child rugged and strong bichloride of mercury may be given to hasten disintegration of false membrane. The most remarkable case coming under his observation was a child of four years upon the verge of suffocation, when, upon the tube being introduced, a considerable portion of false membrane was thrown out through the tube and the violent symptoms subsided at once. The thread was removed, and the second day after the operation the child was playing about the room and continued about the house during the four days that the tube was worn, and finally made an entire and perfect recovery. DR. WAXHAM thought that in regard to the comparative value of tracheotomy and intubation very much might be said. The text-books give as the percentage of recoveries from tracheotomy about one in three, but these statistics are made up from the most favorable reports. If a physician has one recovery out of three or four cases he is justly proud of it and reports the case; on the other hand, if there is one recovery out of 15 or 20 cases, no report is made. He had known one physician to have operated 50 times with but two recoveries. DR. WAXHAM held that the thread should always be removed, as it is a constant cause of irritation, and that no difficulty need be experienced in removing the tube with extractors. He thought intubation had a grand future.

DR. E. FLETCHER INGALS did not take an enthusiastic view of intubation excepting for young children, when he thought it would be found more satisfactory than tracheotomy. In very young children tracheotomy does not result well, and he thought intubation would be unsatisfactory in older ones until we have larger tubes. He stated the accepted opinion of surgeons to be that a tube of less than one-fourth of an inch in diameter cannot furnish sufficient air for a child to live on. DR. INGALS thought that DR. WAXHAM had been remarkably successful with intubation, and had demonstrated its utility, for which he deserved credit. DR. INGALS thought that intubation of the larynx is preferable to tracheotomy in children less than three and a half years of age; children much older than this cannot get a sufficient amount of air through the tube now in use. He said, also, that in performing one operation he had had trouble with the gag, which was not large enough for the child, a boy of five years, who lifted his teeth from the gag and closed them on the doctor's finger. He thought there was no need of the thread remaining, as there could be little difficulty in removing the tube. DR. INGALS thought in cases where it was difficult to get the consent of friends, or where the conditions are such that tracheotomy cannot be performed right away, intubation would be of value; there are cases not membranous in which intubation may be of value. The statistics looked pretty bad for tracheotomy, but he had seen statistics of 15 or 16 cases where half of them were recoveries. His success had not been quite so good, but he attributed this to the fact that he had operated on five children who were almost dead, or at least had stopped breathing before the operation began. He had the good fortune once to save a child who had not breathed for what seemed to him 20 minutes. One of the strong points in favor of intubation is that it may be done early, and it does no harm even if unnecessary.

DR. H. T. BYFORD said that there was another way of drawing the line which would more accurately describe the usefulness of the two operations. Intubation seemed to him the operation for private practice, and statistics so far are comparatively favorable to it as such. But the coöperation of the patient's friends, the preparation of the inspired air by passage through natural channels, the freedom of intubation from grave responsibilitiy, its bloodlessness, the simplicity of treatment afterwards, as well as the greater rapidity with which the mucous membrane around the vocal cords will get well, are conditions which have less bearing in hospital practice, where we have trained nurses and all modern appliances, and there is more hope of success in tracheotomy. While he did not think this latter operation favorable for private practice, such advantages as having the tube under the eye, and within reach of

the fingers, of an attendant, the case of local medication, the possibility of removing shreds of membrane and plugs of mucus, and of inspecting the parts by removing the tube, and which, in hospital practice, must secure for it some consideration. He said that there was one clinical fact that had not been mentioned in this connection, yet which, more than all other things put together, accounts for the success of intubation and the failure of tracheotomy as life-saving measures: in the one the patient can cough; in the other he cannot. After intubation the patient can normally close the glottis, compress the inclosed air in the lungs, and with sudden expulsive force expel everything that is sufficiently loosened. This accounts for the fact that with such a small tube the patient experiences no difficulty. After tracheotomy the patient has no means of compressing the air and expelling it with sudden expulsive force; he can simply inspire and expire forcibly and after exhausting efforts get rid of a little of the mucus. This desperate condition of affairs has led some surgeons to employ the dangerous and barbarous custom of introducing feathers or other irritants into the tube to stimulate the mucous membrane, which excites the patient and scatters the mucus both upwards and downwards. When somebody invents an appliance which will enable the patient to really cough through the tube, then tracheotomy will be placed upon a rational basis, and will stand some chance of becoming a useful operation. The doctor thought that tracheotomy had made a poor showing for its years of trial.

Dr. G. C. Paoli said that malignant diphtheria is a morbid poison, and that in epidemic cases there are very few recoveries. He stated that in such cases exudation takes place in the larynx or pharynx, and that an operation would only result in sending the patient more quickly to another world.

Dr. W. E. Quine said that he had operated 12 times for tracheotomy and had not had one recovery in diphtheritic cases. He knew he was not alone in an experience of unvarying failure in cases of this kind; and he knew some surgeons now regard tracheotomy with very little enthusiasm. Itseemed to Dr. Quine unfair to place intubation of the larynx in contrast with tracheotomy upon the basis of the assumption that tracheotomy is always a *dernier ressort*, that it is done when the patient is absolutely moribund, and that intubation is done under the most favorable circumstances. This is not the fact. Dr. Quine said he was personally cognizant of two of Dr. Waxham's cases in which the patients were *in extremis*, and in which death would undoubtedly have occurred in two or three hours had not relief been afforded. Surgeons rarely had occasion to perform tracheotomy under more discouraging circumstances.

Dr. J. J. M. Angear said he wished to call attention to a physiological and anatomical fact that had not been alluded to, viz: that the arytenoid cartilages are not mature and that the chink of the glottis is held open by positive muscular action in small children, whereas in adults and older persons the arytenoid cartilages are mature and the chink is never closed. Dr. Angear said that a large number of children who suffocate will suffocate when there is no membrane present to cause suffocation, but simply some diseased condition that has interfered with the action of the delicate little muscles that draw back the arytenoid cartilages.

When inflammatory action has interfered with these muscles drawing back the artyenoid cartilages, some mechanical interference like this tube will assist these muscles to keep the chink of the glottis open and let air in. He thought a large number of children who died of diphtheria did not choke to death, but died of poison in the system, and he did not think either the tube or the tracheotomy, or any other process, could save them. If there was interference with the opening of the chink of the glottis, he had no doubt that the introduction of the tube would save the life of the child.

Dr. J. S. Knox said that the curses of tracheotomy are the subsequent thoracic complications, either heart clots or congestion and inflammation of the lungs, producing fatal results, and the reason probably is that tracheotomy is the final resort in cases of laryngeal obstruction. He thought that if tracheotomy were performed as early as intubation, there would be fifty per cent. of recoveries. The great advantage of intubation is that it can be performed early, and the early operation of intubation would no doubt save many a life that tracheotomy would not save if performed late. He thought that tracheotomy performed as early as intubation would show as good results.

The President said that he did not intend to say anything against the practice of intubation, but he did not believe that it would take the place of tracheotomy. The early experience of the president in tracheotomy had been almost the same as that of Dr. Waxham in intubation. In the first fifteen cases operated on but half of them recovered, and his later experience was better than that reported by Dr. Waxham, as within the last month he had had three cases of tracheotomy, all recoveries, while Dr. Waxham reports four cases of intubation, all fatal. So far as his own personal experience went, he thought tracheotomy had the advantage. The president thought that if he should put a tube in a child's

throat for the relief of laryngitis and the child died without his having performed tracheotomy, he should consider himself very much to blame. He had no doubt that cases of extreme diphtheritic laryngitis got well after tracheotomy; he had seen diphtheria of the pharynx and of the larynx recover after tracheotomy. Although he did not feel enthusiastic about intubation, he thought it had a very good place and that in many cases might be very useful, but could never supplant tracheotomy.

DR. WAXHAM said he never found the tube occluded when it was removed. In one case when he introduced the tube a portion of the membrane was crowded down ahead of it, obstructing it entirely, and the tube was ejected and was then comp'etely filled with membrane; the child recovered subsequently. On removing the tube on the fourth or fifth day he did not find it occluded.

DR. A. B. STRONG said, in conclusion, that he had had some experience with tracheotomy, having had twelve cases with but one recovery. He had no doubt that in cases of diphtheria the membrane could come up through the opening. The case read was reported as spasmodic croup, and was not supposed to be one of false membrane, but he believed the child would have died without interference, and that belief was shared by DR. DANFORTH, the attending physician. DR. STRONG said that he would hardly feel safe in leaving the tube in the trachea of a child without the thread. He agreed with the president that large pieces of membrane could not readily pass through such a long tube. In the case reported the tube was entirely free from membrane or pus when taken out.

A LARGE LIVER.

BY C. W. HEFFNER, M. D., BELLEFONTAINE, OHIO.

This case is of interest to me for several reasons, but especially for two, viz: Its rapid growth, and because I do not know what the trouble was.

The unfortunate man was 39 years old; had, for several years, been employed as laborer in a gas works; complexion dark; well muscled and rather firmly built; always had very good health, never had any sickness. As I get the history of the case it runs as follows: About Feb. 1st, 1885, he began to have slight uneasiness, after meals, in the stomach, also a feeling as if "bloated;" no pain of any sort, and working all the time at driving wells, having left the gas house and entered the pump business. This "dyspepsia," as he called it, continued to trouble him more or less at times until about the 5th of August, 1885, when he said he noticed an enlargement at the "pit of his stomach." Previous to this time, however, his bowels were very much constipated, and he frequently got medicine from his physician for them.

He continued at work again until August 25th or 26th, when not feeling as well as usual he rested, working again Friday and Saturday, August 28th and 29th. Sunday morning, Aug. 30th, he noticed for the first time that his feet were slightly swollen. This alarmed him and he called his physician. He had noticed for three or four days previous to this that his breath was shorter, but thought nothing of it. He was going about and this, with the treatment given him, lessened the œdematous condition of the feet, and to all appearances he was better. On September 7th he was up town to see his physician, having for a day or two been shorter of breath than usual. He now noticed that the "swelling" in his side was slightly increased. Tuesday night (Sept. 7), being so much more distressed than usual, he had his physician called, without, however, gaining any relief. Enlargement in the region of the liver increased very rapidly. Wednesday found him no better, but very much worse; breathing rapid, pain not so bad until evening, when the suffering was considerable. Thursday morning found him very much worse pulse 120, respiration 60, shallow and painful; suffering intense. Thursday at 4 p.m. he changed physicians. Friday morning at 8 a.m., in company with attending physician, I saw the patient. Found pulse 160 to 200, irregular and intermittent; temperature slightly below normal; respirations 80 per minute, actually panting. Hypochondriac region very much distended; pain almost intolerable.

I do not know the treatment before, but now he got hypodermic injections of morphine, gr. ss, and atropine gr. $\frac{1}{60}$. This did little or no good, and he died at 11 a.m.

Post mortem revealed everything normal, save the liver, which was very much enlarged, weighing 19 pounds. The surface was smooth, and perfectly intact. There was no part of it broken down, no hard nodules, but very heavily pigmented. I was so anxious to know the cause of all these peculiar phenomena that I sent a specimen to a microscopist for examination, but never got any return. One diagnosis before death was Hodgkin's disease; another was cancer of the stomach.

I report the case because of the size of the liver, because of the little attention it attracted until so near the end of life, and because of the uncertainty of its cause.

The COUNT DE LAUBESPIN has contributed 40,000 francs to M. PASTEUR in order to enable the scientist to extend his operations for the prevention of hydrophobia.

OPIUM TREATMENT OF PUERPERAL PERITONITIS.

BY GEORGE A. TROTT, M. D., BUCKHOLTS, TEXAS.

On January 9, 1886, I was called on to attend MRS. B——, in her fourth confinement. Examination revealed a cicatrix encircling three-fourths of the os uteri, and which I attributed, after questioning the patient, to cauterization for ulceration, several years previous. After ten hours of only ordinarily severe labor, and without instrumental interference, she was delivered of a healthy girl child, weighing eight and one-half pounds. The cicatrix having been necessarily torn asunder in several places during dilatation of the os, and finding the mucous surface of the vagina somewhat abraded, I thought best to order an antiseptic wash to anticipate, and if possible, prevent any evil results. I accordingly ordered ʒ j of boracic acid in a pint of hot water twice a day.

Notwithstanding this precaution, I was informed on the 12th, that MRS. B. had had a severe rigor during the night, and I found her suffering with all the usual symptoms of puerperal fever; temperature 103°, pulse 130, and respiration 20; tenderness confined to the uterus. I ordered the boracic acid enema increased in frequency to every four hours, and gave iodine and salicylic acid alternately.

The morning of the 13th, found my patient in the same condition. Treatment continued, with the addition of occasional doses of digitalis to strengthen the heart's action. On the 14th, at 9:00 a. m., the soreness had increased and extended to the peritoneum, and the patient complained of exhausting sweats whenever she fell asleep. She was troubled with vomiting and was perceptibly weaker, with no abatement of the febrile symptoms. I immediately ordered Dover's powder, 12 grains every hour, till she had taken three doses, then continued every two hours for ten hours, making 96 grs. in 15 hours. By this time my patient was thoroughly narcotized; respiration 12, pulse 70, and temperature 99°, with gentle perspiration, and pain and soreness all gone. There was no return of the fever, and the patient progressed rapidly on tonic treatment and is now up.

The will of the late PROFESSOR ROBIN contained the following clause: "If I die in Paris, let my autopsy be made at the earliest possible moment after my death, by one of the prosectors or attendants of the Ecole de Medicine, to be designated by the Dean. My brain and eyes should be removed and studied comparatively. The left eye was destroyed by a blow in 1835, and the optic nerves and convolutions should be studied with this fact in view."

Correspondence.

HEAT AS AN OXYTOCIC.

During the past year there have been three communications in the AGE concerning heat as a new means of hastening labor. There were also a number of articles on the same subject in other journals.

Those old practitioners who are so generally denominated "mossbacks," and "fossils," who know full well that their grand-mothers made use of heat for the purpose noted, are probably keeping still because they dislike to spoil the enjoyment of the new discoverers. I know of many old ladies who learned it from their mothers and grand-mothers, and if it were possible to trace it back we would probably find that these Israelitish women who were too smart for the Egyptian midwives knew of it and practised it. From a somewhat extensive acquaintance among country practitioners in Southern Michigan, I know that for the last fifteen years it has been commonly used, both by neighborhood midwives and medical practitioners. It is no *un*common thing when reaching a confinement case to have the women in attendance remark that they had not dared to soak the patient's feet in hot water, nor put hot cloths to the abdomen, nor give any hot drinks for fear the doctor would not get there in time. A common practice is to take two good-sized flannels, and keep one heating in a common steamer while the other is applied as hot as can be borne to the abdomen and vulva. This, with many practitioners, is considered a good reliable preventative of the rupture of the perineum. CHURCHILL recommends it for the latter purpose.

M. R. MORDEN, M. D.

ADRIAN, MICH.

P. S.—Since writing the above I am reminded of a story that seems to "fit in" so well on this subject of oxytocics that I am constrained to ask you to give it space as a post-script to the above.

While spending a cold winter's night in a farm house, in attendance on a case of confinement, a good old Baptist sister relieved the tedium of the slowly dragging hours with some very droll and amusing stories. Among others she told the following:

Two young men, brothers, went west to speculate. They reached a frontier hamlet that, as yet, had but one doctor. At the hotel one was heard to call his brother "Doc." It soon got noised around that a young doctor had arrived, and was looking for a good opening in which to locate. One night a man came to the hotel after bed time, and said that the village doctor was away off on the plains several miles, and

that his wife was about to be confined and he wanted the young doctor that he had learned was stopping at the hotel, to come over and attend the case. "Doc." was accordingly aroused, and his brother taking in the situation, told him, in a whisper, to get up and go, and to make believe that he knew all about it anyhow and have some fun. Accordingly he dressed and went as requested. He made careful inquiry concerning what the women present had already done. They told him how they had used hot drinks, hot foot-baths, and hot cloths to the abdomen. He informed them that their treatment was just what he should have used had he been there, and then he asked them if they had "quilled" her. This produced a sensation. Some of the women looked surprised, but could not refrain from giggling. Finally one of their number said they did not know what that meant. He then very coolly asked for a quill and some Scotch snuff, both of which were promptly produced. Having filled the quill with the snuff, he put one end up the patient's nose and blew at the other end. The patient went into a violent fit of sneezing, the waters broke, and in ten minutes the child was born.

The telling of this story made our patient laugh heartily, and as a result a violent pain came on, which was rapidly succeeded by others, and soon delivery was accomplished.

I know full well of another case, where a young physician was sent to a case of confinement because of sickness in the family of his senior partner, who was the patient's choice. The husband kindly warned the young doctor that his wife would be angry and out of patience with his coming, and that he must make the best of it and not mind what she said.

Sure enough, the young doctor found he had got himself into a hornet's nest. He put up with hard "hetchelling," and made himself as useful as he could, assisting about the application of hot cloths, and other means, to at least keep up a show of doing. Whining and fault-finding, however, he found to be his portion, with no show of a let-up. Finally he jocularly told her that he thought he should sit her up in a rocking chair, get in bed himself, have hot cloths applied, let somebody pull on his hands, and he would "see what he could do." This made the attendants laugh, but so enraged the patient that a violent pain came on, which lasted a few minutes, and ended in a safe delivery. I am not sure that mental impressions and sneezing have ever been properly noticed and classed as oxytocics.

M. R. M.

INJECTIONS OF HÆMORRHOIDS.

In the AGE of Jan. 25, N. P. BLAKESLEE, of Elmira, Mich., in his query regarding the injection of hæmorrhoids for radical cure, asks: "Is it safe to operate without using a clamp?" In reply I would say that I have performed the operation a number of times—never using a clamp, by injecting the following solution:

℞ Acidi carbolici
Olei olivæ, ää ʒ ss.
Morphinæ sulph., gr. iij.
M.

Sig.—Inject 5 to 10 minims, according to the size of the tumor, and into the base of the tumor.

I have yet the first serious indication to note. I think if the solution to be injected be of proper strength and injected properly, that the pile will be so thoroughly "cooked," as it were, that all avenues will be completely obliterated, so that coagula floating from that point would be almost out of the question.

B. F. GOODSON, M. D.

HOPKINS, MO.

A FULL-TERM CHILD AND A SIX MONTHS' FŒTUS AT ONE BIRTH.

The following case, coming under my care recently, may be of interest to some of your readers:

Was called to the country to attend a lady who was said to be ready to be confined. On arriving at the house I made examination, and found the labor had progressed so far that the os was dilated to the size of a half dollar. Pains slow and sluggish. The woman, however, was strong and healthy, but seemed to be nervous and excited, as she said it was two months too soon for her confinement. The child, however, was born alive, and the head presented. After waiting half an hour I gave her a drachm of ergot, followed by three others, in space of an hour. The pains became very severe and more frequent, but the labor did not progress. Having given all the ergot I had with me, I tried pressure, had the woman sit up, and various other ways to cause the labor to proceed, as I had no forceps with me. After two or three hours' waiting I had the pleasure to see the child born with three terrific pains, but I was surprised to find a very small child, it only weighing three or four pounds, and the woman having a very large pelvis. After giving the child over to the nurse, and turning my attention to the woman, I found a partially delivered fœtus of about six months, with head crushed to a jelly. After a half hour I delivered this with a great deal of trouble, and following it, two distinct placentas corresponding to the ages of the fœtuses.

Query: Were there two distinct conceptions at two different times?

G. W. WHITELEY, M. D.

ALBANY, MO.

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Editorial.

HYPNONE, THE NEW HYPNOTIC.

"God bless the man who invented sleep," and scarcely less entitled to the benisons of his kind is he who, when nature refuses to weigh the eyelids down, can select from her resources an agent which will persuade her to let the curtains drop. There are hypnotics and hypnotics, but the hypnotic which is purely such and leaves no trace behind, has yet to be discovered, unless, indeed, it has been given us in hypnone, the latest addition to the list. The reports which are being furnished on this new agent certainly show it to be an almost perfect sleep-producer, its action being more free than that of any of the others of its class from the after-effects which make themselves objectionable, *e. g.*, opium, chloral, potassic bromide, paraldehyde, etc. Chemically, hypnone is a phenyl-methyl-acetone. It is obtained by submitting to distillation a mixture of benzoate and acetate of calcium. It presents itself at the ordinary temperature in a liquid state, but it suffices to lower the temperature four or five degrees for this body to assume a solid crystalline state. Hypnone is a colorless, very mobile, very refractive liquid, boiling at 198° C.

Limousin, who has studied with care the chemical and physical properties of this body, has shown that it is neither soluble in water nor in glycerin, but that it is very soluble in alcohol, ether, chloroform, benzine, and turpentine. Its density is very nearly that of water; one cubic centimeter weighs 1.6 gms. With the graduated dropping tube of Lebaigne, one cubic centimeter of hypnone gives from thirty-nine to forty drops. Every drop weighs about two and one-half centigrammes. The reaction of this body is neutral, but it is irritant and caustic and when applied to a mucous membrane, it provokes pain and severe smarting.

Hypnone has a very persistent odor which resembles at once that of newly-cut hay, of convallaria, and of cherry-laurel water. This odor is so very persistent as to render its administration in potion very difficult. The only really good mode of administration is that of the capsule, whether the hypnone be dissolved in oil, after the fashion of Limousin and Adrian, or whether ether be employed as the excipient, as in Clertan's pearls.

Physiological experiments with the agent seem to have established the following effects: (1) on the nervous elements, diminishing neurility; (2) on the blood-pressure, which it lowers; (3) on the composition of the blood, which in toxic dose it modifies. It is to this triple action that it owes its hypnotic properties. Dujardin-Beaumetz has shown that in order that a medicament may be classed in this group it must lessen the cerebral circulation and the excitability of the nervous elements. Hypnone having thus double physiological action, ought to be classed among the true hypnotics.

The only consequence following the introduction of hypnone into the human subject is sleep. Even when in the same patient the medicine has been prolonged for months, none of those effects of denutrition which Mairet and Combemale have noted in their animals, have been noted.

These are the symptoms which are observed in a healthy man after the administration of twenty centigrammes (three and one-third grains) of hypnone: In the case of ether-hypnone capsules, at the moment of the rupture of the capsule in the stomach, there is a sensation of heat followed by a few eructations having the penetrating odor of aceto-phenone; these symptoms are scarcely noticed when the capsules contain a mixture of hypnone and oil. Then, at the end of a time which may vary from twenty minutes to three-quarters of an hour or even an hour, the eyes close and sleep ensues. This sleep is ordinarily calm and it is quite deep; waking is generally easy, without that nausea and loss of appetite which so often attend chloral and paraldehyde. In other cases, however, headache is felt, that heaviness of the head, and that pain over the eyebrows which are so often observed after a drugged sleep.

The hypnotic effects of hypnone are far from being constant, some persons being absolutely rebellious to this agent, which seems rather to favor sleep than provoke it, being neither analgesic nor anæsthetic in doses of from twenty to forty centigrammes (three to six grains). Nevertheless—and this is an interesting point—its hypnotic action, according to Dubois and Bidot, notably augments the anæsthetic effects of chloroform. These experimenters have shown that when a dog is made to inhale a 4-per-cent. mixture of chloroform, it does not produce anæsthesia, but if previously there be injected under the skin one cubic centimetre of hypnone, anæsthesia as profound as with a 12-per-cent. mixture may be produced, and when the animal awakes, if it be given an-

other cubic centimetre of hypnone, it falls asleep again. According to DUBOIS and BIDOT, hypnone proves itself far superior in these cases to morphine. New researches are being made by these experimenters to ascertain if anæsthesia may not be produced by inhalation of a mixture of chloroform and hypnone.

As for the therapeutic applications of hypnone, they have consisted almost exclusively in the treatment of insomnia; but insomnia is a symptom of complex origin, and it is necessary here carefully to discriminate the cases.

Having a very feeble analgesic power, hypnone does not seem to act in cases of insomnia caused by the persistence of pain, and in this respect this medicament has proved itself very inferior to chloral. It is the same when the absence of sleep is due to coughing, as in the phthisical, and we have had no well-marked results from it in such cases. When, moreover, the insomnia results from the febrile state, hypnone has little action, and is inferior to chloral and paraldehyde. But it is not so in nervous insomnia, or in sleeplessness which is produced by cerebral excitation, whether resulting from alcoholic excess or from mental strain. Here hypnone is equal and even superior to the other hypnotics. In these cases aceto-phenone, in the dose of twenty to forty centigrammes, produces a calm sleep, without nightmare, followed by a tranquil awakening and freedom from that nauseous state which other hypnotics so often determine. But, in order that hypnone may produce its hypnotic effects, it is essential that the patient shall not have been an habitual morphine-taker. In morphiomaniacs it fails, as do most of the other hypnotics.

Hypnone is best administered by mouth, and generally in the form of capsules; the dose must not exceed fifty centigrammes (seven and a half grains).

DUJARDIN-BEAUMETZ concludes from his extensive experiments and observations that hypnone ought henceforth to take its place in therapeutics by the side of chloral and paraldehyde, holding a rank inferior to chloral, however, since this acetone is deprived of analgesic properties, but almost equal to paraldehyde—almost equal, because paraldehyde, which is but slightly analgesic, determines sleep much more markedly than hypnone.

From his studies of the subject that author thinks himself justified in drawing the following conclusions:

1. Hypnone is a mixed acetone of the aromatic series.

2. This acetone is toxic, and its greater or less degree of purity seems to have a notable influence on its toxicity.

3. Hypnone in toxic dose produces in animals sleep, analgesia, anæsthesia; it diminishes the neurility of the nervous elements; lowers considerably the blood-pressure, modifies the respiration; and alters the blood-composition.

4. In a massive dose of twenty to forty centigrammes hypnone has never produced in man any other appreciable physiological symptom than sleep; it is a hypnotic, especially applicable to nervous insomnia or that produced by alcoholic excesses, or too prolonged intellectual labors.

OERTEL'S TREATMENT OF OBESITY.

The money which is said to be made from the manufacture and sale of anti-fat remedies, attests the fact that a superabundance of adipose is not considered æsthetic. BANTING won for himself considerable fame through his method of reducing the size and weight of the obese. His regimen was, however, soon found to be deleterious to the general health, and it fell into general disuse. It is highly desirable for hygienic as well as æsthetic purposes, that some physiological method of reducing fat be made known, and that of OERTEL seems now to answer very nearly the requirements. The principle involved in it is the strengthening of weakened muscular tissue, and this is sought to be accomplished by a limitation of the amount of food and liquids ingested and systematic exercise.

A fat man weighing 78 kilograms, will probably have 12 kilograms of blood, will consume daily 2,000 grams of food, and in all four kilograms of water, while the fluid excreted will fall short of that ingested by 100 grams, which will be daily added to the body-weight, *i. e.*, to the blood and fluids in the tissues. DR. OERTEL begins by reducing the total weight of food to 900 or 1,000 grams, or about one-half, and the water to a still lower proportion.

A healthy man takes usually about 130 grams of albumen, 84 of fat, and 404 of carbohydrates; OERTEL gives his patients 169 of albumen, 43 of fat, and 114 of carbohydrates. This increase of the nitrogenous and decrease of the non-nitrogenous food-stuffs is nothing new; but the true explanation was first given by E. VOIT, who proved that, though carbohydrates in excess tend to the production of fat, they act only as "sparmittel," or means of checking metabolism. Their proper function is to minister to the production of force, and the fat is formed from the albuminates, which break up into fat and urea, having previously combined with the elements of water, but a preponderance of albumen in the food favors a more rapid and complete metabolism of the albuminates into urea and uric acid, after they have raised to a maximum the albumen circulating in the fluids of the body.

At first the thirst felt is distressing, water being permitted only in small quantities, and after digestion has well begun; but it soon be-

comes unimportant, and the secretion of the kidneys is increased. As œdema of the legs disappears, the limbs act more freely, and the heart's action is less feeble.

The next procedure, and that which gives the name to the "cure," consists in a course of exercise in walking, first on level ground, and then on gradually increasing gradients. For this purpose several establishments under medical direction have already been opened at Meran, Bozen, Arco, Baden-Baden, Abbazia, and other suitable sites on mountain-slopes, where the different stages are marked by large red figures painted on the rock. At first the patient is not allowed to speak, and bidden to walk slowly; should palpitation come on, he must inspire with one step, and expire with the next, a proceeding which, like other "respiratory gymnastics" of our German friends, is said to make the breathing easier. He may also stand still at every eight or ten steps, and, if necessary, support himself by leaning on a post or rock; but on no account may he sit down until his day's distance has been accomplished.

Such efforts, however judiciously prosecuted, are found to make great demands on the patient's strength, and call for a diet very different from that of the ordinary table d'hôte. Dr. Oertel recommends the following: For breakfast, a cup of tea or coffee, with 150 grams of milk and 75 of bread; midday, 100 grams of soup, 200 grams of boiled or roast beef, veal, game, or poultry, without fat, fish dressed without oil or butter, salad and green vegetables to the patient's fancy, 25 grams of bread, and farinaceous food or milk puddings not exceeding (?) grams, a little fresh fruit, but no drink; in the afternoon, 150 grams of tea or coffee, or at most one-sixth of a litre of water; in the evening for supper, one or two light boiled eggs, 250 grams of meat, 25 grams of bread, a little cheese, salad or fruit, and for a beverage one-sixth to one-seventh of a litre of wine, with, perhaps, one-eighth of a litre of water. Should so abrupt a change from the patient's ordinary habits prove too trying, some relaxation is granted, and those who suffer from obesity only are allowed a glass of beer at dinner.

Sphygmographic observations are made daily in all cases; and Dr. Oertel alleges that he has restored to the normal some of the most characteristic cases of weak hearts, while patients who at first could scarcely walk on flat ground without panting and palpitation, have been able to perform ascents of the mountains before leaving.

THE TREATMENT OF DIPHTHERIA BY THE GALVANO-CAUTERY.

When it is remembered that diphtheria is a *bete noir* in medicine, and that its study, experimental, clinical and pathological, by the best minds, animated by the best motives, has left us still groping in the dark for some certain remedy or line of treatment, the eagerness with which anything new which is advanced with positive claims of merit, is received by the profession, will be readily understood. The latest new thing (which is really but a revival of an old method) is cauterization, with the galvano-cautery, of the membrane. Nearly thirty years ago, a French military surgeon advised the employment of the actual cautery. The difficulties in the way of its use, were, however, sufficient to prevent its popularity. These have been overcome in the galvano-cautery, and, doubtless, the claims of Tedeschi, of Trieste, and Bloebaum, of Coblentz, who have, almost simultaneously, written on the new method, will be soon tested. It is said that the application of the cautery is attended with no pain and is followed by a curling up and exfoliation of the membrane, the ulcerated surface remaining showing no disposition to be again involved. The fever is said, also, to abate with the shedding of the membrane and the swelling of the throat to disappear. Should there be any dread of pain it can be prevented by means of applications of cocaine.

Notes.

A writer in the Lancet gravely holds that there is danger to doctors who, in visiting their patients, come out of warm houses and sit on the cold seats of their vehicles—they part with their animal warmth to the inanimate material. To protect his brethren against this danger, our philanthropist suggests that they provide themselves with India-rubber hot-water bags on which to sit. When a doctor leaves his "brougham" or carriage he should carefully cover up this hot-water bag with a rug, so as to have it nice and warm for his nates against his return. This is but a sample of the stuff which sometimes finds its way even into a first-class journal. Fancy a man riding around on a bag of hot water! We should expect to find his unmentionables so thoroughly saturated with perspiration as to create a suspicion in his mind that he had been suffering from enuresis. To expose a fundament thus heated to a temperature below zero, would be apt to set up a prostatitis, an epididymitis or a cystitis, and even a urethritis might be set up as acute, though not as specific, as that frequently said to be caused by sitting on other than a buggy-seat.

A local physician, noted for his "horse-sense" rather than for special talent in the direction of "exact" diagnosis, has added one more to

the long list of signs in the diagnosis of pregnancy. He was consulted by a husband who was anxious to be a father, and who had begun to flatter himself on the supposed appearance of encouraging symptoms, after a year or so of faithful effort and anxious waiting. The doctor was requested to visit the house, and to institute the necessary examination to test the correctness of the suspicion. On entering he was met by an assortment of poodles with ribbons around their necks; a canary bird was similarly decorated, and the lady whose fond spouse cherished the hope that she might be in an "interesting condition," could with difficulty interrupt the conversation with the parrot sufficiently to reply to the doctor's introductory questions. After a brief survey of the collection, our friend, thoroughly disgusted, declared positively against the theory of pregnancy. "No woman," said he, with due interlarding of expletives, "who ties ribbons around the necks of poodles and canary birds, and keeps up a chatter with a parrot, is ever likely to have a baby."

At a recent banquet SIR SPENCER WELLS told a story from his personal experience as a young man, which has in it a lesson for the older men of to-day. He had been called in the absence of DR. BRAITHWAITE, the family physician, to see a girl whom he found lying, insensible, on the bed. Not knowing what to do he gave some brandy-and-water. DR. BRAITHWAITE then arrived, and after examining the case ordered two teaspoonfuls more of the mixture, but as soon as he was alone with WELLS, said: "It was very wrong to give her brandy-and-water. It is the first stage of some eruptive fever. But a teaspoonful won't make any difference, and it will show that I did not differ from you. If I had," he added with a kind smile, "perhaps they would not believe either of us." There was something in this way of treating a junior—so much good-feeling, mixed with so much knowledge of human nature—which so impressed the future SIR SPENCER as to influence him in his consultations with his juniors.

It now transpires that many eminent European scientists affect to have understood DR. J. S. BILLINGS to say, when he invited the International Medical Congress, at its Copenhagen meeting, to hold its next session in Washington, in 1887, that the American government would pay the expenses of all who might attend from across the Atlantic. That would certainly ensure an attendance from abroad. The fight between the American Medical Association and the original committee would be forgotten by our foreign friends in the profuseness of their uncle's generosity, and they would come over in force to favor and honor us with their presence. Unfortunately (for them), however, all that DR. BILLINGS promised was that such of them as came over would not have to pay the registration fee, of $10.00, and this fact is now being promulgated abroad. It is really too bad to thus disturb the dream of a prospective visit to this country and all to cost not a kreutzer! It is feared that the effect of the awakening will be to kill off much enthusiasm.

SIR SPENCER WELLS: Men of science, as DUMAS said of LAPLACE and CUVIER, "know a happy life. Animated by the love of truth, indifferent to the enjoyments of fortune, they have found their repose in public esteem." PASTEUR said of DUMAS, that he represented "true merit in a true democracy"—a democracy which permits every individual to give the world the maximum of his efforts. "And why," asks PASTEUR, "should there be alongside of this productive democracy another which is sterile and dangerous, and which (under I do not know what pretext of chimerical equality) dreams of absorbing and annihilating the individual in the State?" This pseudo-democracy has a worship for mediocrity; it suspects whatever is superior. It might be defined as the league of all who want to live without working, to consume without producing, and to obtain posts without being trained for them, and honors without being worthy of of them.

British Medical Journal: The steady progress which medicine has made from year to year for the last half-century has transformed the physician's art, and contributed largely to diminish the weight of human misery and disease; of this we are not unfrequently reminded by veteran physicians who can look back for this period, and to whom the subject, as published addresses and orations show, has an irresistible attraction. To trace the upward course from year to year, to lay a finger upon this fact or that, and say here is something known now but not known a year ago, is less convincing; for the science and art of medicine does not advance by leaps and bounds, but by a slow process of accretion strictly analogous to organic growth. The tendency of medicine in this generation is primarily towards analysis; the analytical method has been applied to every department, and a minute accuracy and precision of observation has been cultivated.

The editors of the Louisville Medical News merit some kind of a reward—they have recently read an article on the International Medical Congress! It was by one of the "trooly loil," too, and, in spite of its characteristic language, they waded it through with sufficient precision to enable them to give a synopsis of it. The author, we are told, holds those who oppose the action of the American Medical Association in deposing the original committee,

to be wide-mouthed soreheads, monkeys, parrots, wild asses, kangaroos and skunks—in short, a whole menagerie—and asserts that all "this noise and din about the Congress is but the expression of disappointed ambition on the part of a few conceited ourang-outangs." The chances are that when the Congress meets the profession of this country will be very largely made up of this kind of "ourang-outangs."

The Southern California Practitioner is the name of a new journal laid on our table. It gives as the excuse for its birth the distance, rugged intervening mountains and entirely diverse commercial and industrial interests which are separating California into two separate and distinct sections, which obstacles prevent also a close union of the medical profession of that section. This first issue is very creditable. Its original articles are all from the pens of physicians of the Pacific slope and they certainly demonstrate the capability of the profession of that section to acquit itself with credit, and the editorial department shows no commonplace talent. We wish the new enterprise abundant success.

According to the College and Clinical Record, PROF. BARTHOLOW advises the giving of ten-drop doses of dilute nitric acid before meals, to relieve fermentation in the stomach. With due deference to DR. BARTHOLOW'S reputation as a therapeutist, we beg to submit that this is not the proper treatment. Fermentation is due to a deficient secretion of gastric juice, and the giving of an acid before a meal tends to further check the secretion. When acidity is due to hyper-secretion of the gastric juice give the acid before meals to check it; when it is due to deficient secretion give nitro-muriatic acid after meals to supply the deficiency.

At the recent meeting of the Medical Society of the State of New York, DR. F. M. HAMILTON, of Auburn, read a paper in which he declared that death by hanging is usually accompanied by a discharge of semen, and advanced the fact as a new sign for determining this mode of death in suspected cases. Where this discharge is not discovered on the clothing, pressure on the urethra may cause its appearance. The microscope is, of course, necessary to determine the identity of the fluid.

A remarkable number of cases of otitis media have developed in this community within the past few weeks, due, doubtless, to the sudden and great climatic changes. We have found the instillation of a four-per-cent. solution of cocaine hydrochlorate to answer an excellent purpose in the relief of the pain of the affection. In one case, however, the use of the remedy was followed, within ten minutes, by such active delirium as to render its continuance inadvisable.

The Committee on Commerce, of the House of Representatives, has agreed to recommend a bill providing for the appointment of a commission to visit Mexico, the Central American States and Brazil, charged with the duty of investigating the methods in vogue in those countries for the prevention of the spread of yellow fever. The commission is to consist of three persons, two of whom shall be selected from among those already in government employ and one from civil life.

Several communications have been received on the subject of the prevalence of winter diarrhœa this season, and some of the writers have found a cathartic dose of cascara sagrada to be very efficacious in its treatment. This may, perhaps, furnish an argument for homœopathy, but if experience attests the fact, it matters little what theory it is make to do duty in supporting.

The Singhalese (Ceylon) midwives, when a child is born, wind the cord around their index finger and hold it with a tight grip, to prevent the womb from rising into the chest and stopping respiration. This may seem very funny, but we need not go to Ceylon to find conceptions of physiology equally ludicrous among those assuming the important functions of the accoucheur.

The School of Pharmacy connected with the laboratory of MESSRS. PARKE, DAVIS & CO., was addressed by PROF. A. B. PRESCOTT, of Ann Arbor, on Monday evening, February 15. Subject: "The Co-partnership of Carbolic, Benzoic and Salicylic Acids." It is hardly necessary to say that the lecture was very interesting and thoroughly enjoyed by the class and other employees.

There is a serious breach in the friendly relations which erstwhile existed between the Mississippi Valley Medical Monthly and the Memphis Hospital Medical College. The Medical Record declares that the sympathies of the on-lookers must be with the journal, on general principles, "since local medical journals are helpful to the profession, while local medical colleges are sometimes so, but not always."

The next Sanitary Convention under the auspices of the Michigan State Board of Health, will be held at Howell on March 3 and 4, prox. A very interesting programme has been prepared. DR. J. A. WESSINGER, of Howell, is the Secretary, and he will be pleased to furnish all the information of which this notice may be lacking.

VERNEUIL, in a recent address, declared that for thirty years his rule has been in selecting his cases for operation from among children, whether of the rich or of the poor, to ask himself the question "What would I do if it were my own child?"

The Milwaukee Sentinel is authority for the statement that more people die of trichinosis in one year than die of hydrophobia in twenty. Notwithstanding this fact, however, the hog is neither muzzled nor shot down, nor does its owner pay any tax.

Apropos of the ingenuity which displays itself in the multiplicity of obstetrical and gynecological devices, BARNES quotes the remark of Pajot "that he does not reproach a man for having invented a forceps, since that might happen to anyone."

DR. BOGART, of Sharptown, Ind., takes the position, in discussing the physician's liability to prosecution for malpractice, that the doctor who owns property is either a fool or a very careless man.

The Health Officer of New York City has what in popular terms might be called a "snap." His remuneration comes in the shape of fees, and it is estimated that his income is from $50,000 to $75,000 a year.

The profession will regret exceedingly to learn that DR. N. S. DAVIS, of Chicago, has recently had an attack of hemiplegia. The pleasing intelligence comes to us, however, that he has, in a great measure, recovered.

The physician who does not report his "interesting" cases does himself an injury, and the profession an injustice.

Formulary.

FOR CHAPPED HANDS.

℞ Zinci oxidi, gr. xx.
Acidi tannici.
Gum. camphoræ pulv., ää gr. xv.
Glycerini, ℥ iv.
Tr. benzoini, ʒ ss.
M.

DR. J. W. SWIFT, in *N. E. Medical Monthly.*

FOR SORE NIPPLES.

℞ Zinci sulphatis, gr. xv.
Acidi lactici, gr. xij.
Glycerini, ℥ ij.
Amyli, ʒ iij.
M.

Sig.—Apply with a camel's hair brush between nursings, taking care to wash off before putting child to breast.

DR. E. THOMAS, in *N. E. Medical Monthly.*

FOR WHOOPING-COUGH.

ROTHE (Memorabilien) recommends the following after an experience of fifteen years in its use:

℞ Acidi carbolici,
Spts. vini rectif., ää gr. viiss.
Tr. iodini, gtt. v.
Ag. menth. pip., ℥ iss.
Tr. belladonnæ, gr. xv.
Syr. diacodii, ʒ ijss.
M.

Sig.—A teaspoonful every two hours.

—*N. Y. Med. Journal.*

FOR GASTRO-INTESTINAL ATONY.

Nouveaux Remedes gives the following formula for this condition:

℞ Tr. nucis vomicæ, ʒ ij.
Ext. rhamnus pursh. fluidi, ℥ ijss.
Syrup.
Aq. lauro-cerasi, ää ℥ ij.
Aq. dest., ℥ j.
M.

Sig.—Three or four teaspoonfuls a day.

FOR CYSTITIS.

℞ Tr. elaterii, ʒ i to ʒ ij.
Ext. belladonnæ fl., gtt xv to gtt xxx.
Aquam q. s., ad ℥ iv.
M.

Sig.—A teaspoonful every two or three hours.

In conjunction with this the patient should drink freely of watermelon seed or slippery-elm bark tea.—DR. FLOYD CLENDENEN, in *Therap. Gazette.*

COLIC MIXTURE FOR CHILDREN.

℞ Sodii bromidi, ʒ jv.
Ol. anisi, gtt ij.
Tr. opii camph., gtt. xxxij.
Aquam q. s., ad ℥ ij.
M.

Sig.—Shake and give a teaspoonful every hour as required.

—*Indiana Pharmacist.*

SEDATIVE FOR TEETHING OF INFANCY.

℞ Cocaine muriate, 1 part.
Sodium borate, 1 part.
Syrup of marshmallows, 20 parts.
Syrup of poppies, 10 parts.
M.

Sig.—Gently rub the gums with the syrup four times a day.

L' Union Medicale.

Medical Progress.

UTERINE HÆMOSTATICS.—Uterine hemorrhage is so frequent an accident, and in so many cases has such serious consequences, immediate or remote, that means for its arrest have been eagerly sought. Medicines that have been, or are used as uterine hæmostatics, may be counted by the score, but he who should try these various means would probably, at the end of his experience, be in the condition of Sganarelle, in one of Molière's plays, who said, "Remember never to believe anything, even if you should see everything." Some one has said that the end of all philosophy is a learned doubt, and certainly the end of all investigations as to the value of the many medicines asserted to be uterine hæmostatics will be a learned doubt, if not a positive denial of such virtue to the majority of these, and a qualified approval of the few remaining. Indeed, we know a distinguished gynecologist who rejects this entire class of agents; he has been so often disappointed by individual members of it, and relies solely upon copious vaginal injections of hot water.

Probably the tendency of therapeutics in recent years is to rely less upon the gross elements of materia medica, the things which we can see, handle, weigh, and more upon the subtle forces, such as heat and electricity, which the physician can bring to his command. And this tendency is very clearly shown in the department of obstetrics and diseases of women. The astringents, mineral or vegetable, which were once in vogue, are now rarely employed for the cure of uterine hemorrhage; if the hemorrhage be grave and the danger imminent, one hardly feels like trusting a medicine which must first enter the circulation and then, in almost infinitesimal dilution, travel to the bleeding part, having there slight or doubtful therapeutic influence, when, by either of the forces mentioned, an instant and positive effect can be produced in most cases. Contraction of blood-vessels, or of the musculature of the uterus, or of both, must be the ultimate styptic power. The sooner that contraction is evoked, therefore, the better. A foreign body, as from incomplete abortion, or as in retention of the placenta in labor at turn, may prevent perfect uterine contraction, and, therefore, this foreign body must be removed before a permanent cure is effected

We may, by certain remedies, such as digitalis, slow the circulation, and thus lessen the flow, but we do not thereby cure. When hemorrhage results from an altered condition of the blood so that it has lost its plasticity, and thus one hemorrhage invites another, deep calling unto deep, we may in some of the cases ultimately cure the flow by remedies which improve the condition of the blood, a process, however, which requires weeks for its accomplishment. When the hemorrhage is consequent upon a toxæmia, as malarial poisoning, medicines addressed directly to that state, such as quinine or arsenic, in most cases prove of marked value.

The tincture of Indian-hemp has been strongly recommended in the hemorrhage caused by uterine fibroids, and in menorrhagia associated with painful menstruation; it is an uncertain remedy, and when it does do good, probably it is solely from the relief of the pain which acts in causing an increased afflux of blood to the uterus. So too opium may, in like manner, act favorably in similar cases, yet neither of these remedies is to be regarded as a certain uterine hæmostatic. The alkaline bromides, from their sedative influence upon the ovaries, may have a beneficial influence in some cases of menorrhagia.

A few months ago a distinguished German authority reported very favorable results from the tincture of hydrastin. The use of this agent for the relief of uterine hemorrhage is not new, at least in this country, but we cannot say from our own experience with the drug, which is probably too limited to justify a positive opinion, that its beneficial acton is observed in all cases, or even in the majority. KUGELMANN, however, has recently stated that he had succeeded in causing the menopause by hydrastin administered internally, and the local application of iodine.

Hamamelis has received the strong endorsement of CHÉRON in the October number of the Révue Médico-Chirurgicale des Maladies des Femmes. He advises fifteen to sixty drops of a tincture made of equal parts by weight of hamamelis and alcohol, twice a day. He also uses the solid extract, one part to five of glycerin, as an application to the neck of the womb, or the extract of cocoa butter, as a vaginal suppository. He asserts that this medicine exerts a positive influence upon hemorrhages and passive congestions, and upon the pain which accompanies these morbid states.

Ergot probably ranks in the professional mind at the head of uterine hæmostatics. It certainly is one of the most valuable remedies both for the obstetrician and the gynecologist. Without considering the obstetric uses of this agent, we may remark that its value in controlling uterine hemorrhage bears a direct relation to the development of the uterus; if this organ be of normal size in the unimpregnated condition, the power of ergot is usually slight, whereas if it be much enlarged, as by a fibroid tumor, that condition termed fibrous pregnancy existing, more decided effects from the remedy may be justly expected. We believe, in all cases of uterine hemorrhage, whether consequent upon a fibroid or not, and when the medicine is continued for a length of time, iron can be usefully combined with it, though there has been a vague notion that iron increases the flow, and hence, is not to be administered when this is excessive. But, in the ergot treatment of uterine fibroids, it frequently happens that a good result is not obtained until the medicine is administered hypodermically. Why this should be so does not seem clear; that it is so some excellent professional observers assert. In hemorrhage from cancer ergot is useless; and this statement is true, whether the hemorrhage be caused by active congestion, as it is in the early stage of the disease, or whether it result from ulceration, as it does in the further progress of the malady.

Time permits a reference to only one other uterine hæmostatic, to wit, hot water. This is applied by means of a rubber bag to the lumbar vertebra, or by vaginal injections. For the vaginal use of hot water to lessen profuse menstruation the profession is indebted to TROUSSEAU, though its general

use in uterine hæmorrhage must be credited to EMMET. Vaginal injections of very hot water constitute one of the most certain means for the arrest of uterine hemorrhage; in some cases the injection is carried into the uterus. Those who have frequently failed with this means certainly have not used the water hot enough, or in sufficient quantity, or with the patient in proper position.

In regard to the mode of action of heat thus applied, all are agreed that it produces contraction of blood-vessels; though some, as KLEINWACHTER, insist that dilatation soon returns. Be this as it may; we have always regarded one of the asserted proofs of contraction of bloodvessels thus affected as possibly an erroneous interpretation of a fact. The shrivelled, shrunken skin of the fingers of a washerwoman, after having her hands in "the suds" for a time, is appealed to as a proof of the contractile power exerted by hot water. But the condition may be dependent upon osmosis from the vessels of the hand, rather than upon muscular contraction of blood-vessels. Those vessels are relatively emptied, not by compression, or at least not solely by it, but by the pressing out of a portion of their contents.—*Med. News*, Dec. 12, 1886.

PURE TEREBENE IN THE TREATMENT OF WINTER-COUGH.—During the last five years I have employed a method of treatment which yields excellent results. I have before me notes of 114 cases of winter cough, some taken at the Chest Hospital, others at Westminster, and others again in private practice. They were all treated with pure terebene, a substance prepared by the action of sulphuric acid on oil of turpentine. It is an agreeable remedy, being a clear, colorless liquid, with an odor like that of fresh sawn pine wood. It will not mix with water; but as the dose is small, it can readily be given on sugar. It is not the same as the patent medicine sold under the name of "Terebene." The best method of indicating its sphere of action and illustrating its utility will be to give a brief abstract of one of the notes of one of the cases. This, it should be said, is a fair average case, taken quite at random:—R. N., aged 43, a commercial traveler, stated that he had been subject to cough every winter for 12 years His work was against him, and he was a good deal exposed to wet and cold and the inclemency of the weather. His cough used to trouble him badly only in the winter: but year by year it seemed to be coming on earlier, and now he was hardly ever free from it. It came on in fits, which shook him to pieces; and it was always very bad the first thing in the morning, often making him retch and vomit. There was a great deal of phlegm, thick and yellow, when he was in the country, but speckled all over with black in London. It was difficult to get up, unless he could get some hot tea or something to loosen it. The shortness of breath was worse than all; for it prevented him from going about, and interfered with his business. He had never spat any blood worth speaking of, but there were at times streaks after a severe bout of coughing. He became no thinner, generally losing in the winter and picking up again in the summer. He had had a great deal of treatment; and mixtures, lozenges, and liniments without end. On examining the chest, it was found to be emphysematous, and there was a loud bubbling rhonchus at the base of each lung. On November 1st he was ordered 10 drops of pure terebene on a piece of sugar every four hours. In three days he returned, and said there had been a marked improvement. The cough was easier, the phlegm was lighter in color and not so thick, and the breathing was decidedly better. The dose was increased to 20 minims every four hours; and a week later the patient wrote to say that he was better than he had been for years, and was almost able to do without the medicine. I saw nothing of him again until January 6th, when, being in town, he came to see me. There had been some return of the old symptoms, and he was anxious for further treatment. I ordered him a small MAW'S spray-diffuser, holding about an ounce, and instructed him to use it with the terebene as an inhalation several times a day. A fortnight later he wrote saying that he had bought a larger apparatus, and that his complaint was more amenable to treatment than it had ever been before. The terebene-spray eased the cough, brought up the phlegm, and, above all, relieved the shortness of breath. On his long railway journeys, when he was unable to use the spray without inconveniencing his fellow-passengers, he rubbed the terebene on his moustache and beard, so that it might slowly diffuse, and, as he said, soften the atmosphere. One of the advantages of pure terebene is, that it is not a bulky medicine. An ounce bottle carried in the pocket will last for days, and is always ready for use. It is best to begin with five or six drops on sugar every four hours, and gradually to increase to 20 minims. This is for most people the maximum quantity, but the drug has little or no toxic action; and one patient was so enraptured with his remedy, that he insisted on taking a teaspoonful every four hours for a week. The only disadvantage I have ever noticed from its employment is that it gives a peculiar and characteristic odor to the urine, a circumstance which patients never fail to mention. When used as a spray, from one to two ounces should be diffused and inhaled every week. In some instances I have tried giving it mixed with an equal quantity of olive oil flavored with oil of peppermint. In 25 cases I have given terebene in the form of an emulsion, made, if I remember rightly, by mixing it with a little tragacanth powder, adding water, and shaking well. Each ounce of the emulsion contained a drachm of the terebene, and it was usually given in half-ounce doses four times a day. The results were excellent, but not better than with the simple terebene itself; and I saw no reason for continuing the use of a more expensive preparation. In every case of winter-cough in which the terebene-spray was used systematically, there was a marked improvement. In many instances it was noticed almost immediately; but in other cases, especially in the very chronic ones, the patient had to continue using his remedy for several weeks. Even when there was marked emphysema, with little movement of the chest-walls, some benefit was experienced. I treated 18 cases of phthisis by the same method, and the results were certainly most encouraging. It did most good when there was old consolidation, when no active

mischief was in progress, and especially when there was no elevation of temperature. I have also used it as a dry antiseptic inhalation on the cotton-wool of a respirator in phthisis, and have been much pleased with the results. In one case, that of a young man, the respirator was worn almost continuously night and day for nine months; and the right lung, which was almost breaking down, cleared up, the temperature becoming normal, and the cough and other symptoms subsiding. I have no doubt that pure terebene would be useful in checking hæmorrhage from the lungs, but on that point I have no experience. Many sufferers from winter cough also complain of acidity and flatulence. I soon found that the internal administration of pure terebene was an excellent remedy for this combination of symptoms. It checks the formation of flatus so quickly, and is so efficacious in expelling any that may remain in the stomach or intestines, that I constantly employ it in cases of dyspepsia when flatulence is a prominent symptom. Patients like it, and often continue taking it for months or years. It acts as an antiseptic much in the same way as glycerin, oil of cajeput, and oil of eucalyptus. I am surprised that it has not come more largely into use in the treatment of flatulence. Pure terebene is of such value in winter-cough, that I rarely experience the necessity of resorting to other remedies.—Dr. Wm. Murrell, in *Brit. Med. Jour.*, Dec. 12th.

The Physiological Action and Therapeutic Value of Quillaia.—In England, as well as in Germany, senega is considered to be an excellent expectorant, and justly, for by means of it thick mucus gets loosened and rendered thinner in cases of emphysema, and of chronic bronchitis, and in certain chronic forms of pneumonia. But, on the other hand, it has been found that the quality of the commercial specimens of senega root is very unequal, for, seeing that the active principle is only to be found in the bark, thick roots can only contain very little. It has also been shown that instead of the root of polygala senega very often the roots of other species of polygala come into the market. These are not easily detected as adulterations, although they contain very little of the active principle. This principle, usually known as senegine or polygalic acid, is by no means a simple substance as found in commerce, or made according to the rules given for its preparation, but is a mixture of various bodies of which two only are active. Both of these are glucosides, one being acid in reaction, the other neutral. The former is precipitable by neutral acetate of lead, and thus differs from all other glucosides. The second is not precipitable by neutral acetate of lead, but is precipitable by basic acetate of lead. The action of both is almost identical, and will be discussed subsequently.

The quantity of these principles present in senega root is quite trifling, and thus it comes about that one only gets a satisfactory effect from senega when the infusion or decoction is very strong—10 or 15 parts in 200 of water. For two reasons, viz: the weakness of the genuine article, and the occurrence of falsification, many experienced physicians have given up the use of this substance.

On investigating this subject I have found that the same two principles which occur in senega are present in considerably greater quantity in another drug which costs but a fifth of the price, that is in the bark of quillaia (Molina). They are easily obtainable, and quantitatively analysable.

I have named them respectively quillaic acid and sapotoxine. One must not imagine that the former is an acid in the usual sense of the word, but only in the same sense as carbolic acid. Schmiedeberg proposes, therefore, to call it quillaïne instead of quillaic acid, but one must remember that the word quillaïne has been in past times applied to the impure mix- of the two substances.

It has been found in clinical investigations in Halle, Strassburg, Freiburg, etc., that the administration of senega can be very efficiently replaced by that of quillaia. The decoction of quillaia bark (5 in 200 of water) has a much pleasanter taste than that from senega, so that even children prefer the former.

The therapeutic results heretofore obtained may be expressed as follows: when expectoration is difficult from the tenacity of the mucus, it is facilitated through the latter being rendered thinner and more copious; at the same time the stimulus to expectorate is increased. It naturally follows that this remedy is not suitable for every case, and it must not be employed when the urgency to cough and the raw feeling in the throat gets too acute. Vomiting and diarrhœa occur much seldomer than after the use of senega. Any aromatic or simple bitter may be used with it as a flavoring agent. The drug itself contains a large quantity of a sweet carbo-hydrate, and consequently can be employed in the case of poor persons quite well without any corrective, which is of course not the case with senega. The remedy is contra-indicated in cases of ulceration of the throat or in the gastro-intestinal canal, since it is too energetic an irritant for such.

The physiological actions of these two glucosides, whether they be from senega or quillaia, were in every case identical.

When injected into the blood, doses of even 0·5 mgm. per kilogramme ($=\frac{1}{340}$ grain per lb.) of the weight of cat or dog caused a fatal result. For rabbits and Guinea-pigs the dose must be slightly increased. In all of the above cases death was due to paralysis of the central nervous system, without a trace of alteration being detectable in any organ, or even in the brain. At the utmost the number of the blood corpuscles in a cubic millimeter was decreased by a fifth. After large doses, however, very decided anatomical alterations show themselves in the gastro-intestinal canal, in spite of the fact that the injection has been made intravenously. These alterations consist in multiple punctiform extravasations, which appear first in the sub-serous tissue, and subsequently in the mucosa and submucosa; they are best seen in the duodenum and in the large intestine. Hand in hand with these hæmorrhages comes on an enormous swelling of the parts affected, and this advances to the formation of diphtheritic patches, which get more or less detached. The fæces of the animal under these circumstances exactly resembles those of dysentery. It is very remarkable that the tumefaction of the

duodenum very often extends along the common duct into and throughout the gall-bladder, which also frequently exhibits extravasations under its serous coat. When injected locally these glucosides act as intense local irritants; in other words, they evoke, even under antiseptic precautions, great œdema and extensive extravasations there, along with functional incapacity of all the immediately neighboring parts. Painted upon the inside of the throat, even when in very dilute solutions, they cause coughing, soreness, salivation, and nausea. Introduced into the healthy gastro-intestinal canal, they do not get absorbed into the blood; only when ulcers are present, or the mucous membrane has been irritated by previous repeated doses, does absorption take place. Most striking is the action of these substances upon the blood, for the red blood-corpuscles become dissolved when one millionth part by weight of the substance is added to it.

These bodies may be correctly described as poisons to the protoplasms. In warm-blooded animals they destroy at first the functions of the most sensitive forms of protoplasms; in other words, that of the central nervous system, and death resulted from cessation of the respiration. In frogs one can, however, show that they are also fatal poisons to the other protoplasms, *e.g.* of the heart; for the motor-ganglia, and then the muscular tissue itself, was paralysed.—Prof. Rudolph Kobert, in the *Practitioner*, Jan., 1886.

The Cold Bath in Typhoid Fever.—The question of the utility of the cold bath in typhoid fever is not yet settled, even in Germany, where the brilliant statistics of Brand and Liebermeister have resulted in the introduction of hydrotherapy into most of the large hospitals. As a routine measure, the system has not found favor in the eyes of English and American physicians, among whom Cayley, at the London Fever Hospital, seems to be the only one who has tested the plan on a very large scale.

In the Berliner klinische Wochenschrift, Nos. 45 and 47, Senator discusses the cold-water treatment, and brings forward evidence to show that equally good results may be obtained without it. Undoubtedly during the past twenty years, since the introduction of hydrotherapy, the mortality from typhoid fever has been greatly reduced in German hospitals, but statistics comparing this with previous periods are manifestly unfair. Other important conditions must be taken into consideration, such as the nursing, the attention to diet, and the general hygienic surroundings, and to the improvement in these Senator is inclined to attribute an important share in the reduction of the death-rate. Glaser's statistics from the Hamburg General Hospital, for 1874-77, show the same mortality, 7.2 per cent., in 937 typhoid patients treated by the ordinary methods, and 868 patients subjected to the cold bath.

As a further contribution to the solution of the question, Senator has instituted a comparison between the results of the treatment of typhoid cases in the eight large hospitals of Berlin, for the ten years 1875-84. Of these he excludes three, the Charité and the two city hospitals—Friedrichshain and Moabit, as the patients admitted to them are from the very poorest classes: while in the Hedwig's Elizabeth, Lazarus, Bethanien, and Augusta hospitals the conditions are very similar, and the patients are drawn from the better classes of the poor. In the three large hospitals, the Charité, Friedrichshain, and Moabit, the average mortality of typhoid cases for the ten years was 16 4 per-cent , 19 6 per cent , and 15.2 per cent., respectively. In the others, which are smaller institutions, the death-rate was considerably lower, as shown by the following figures: Hedwig's, 14.7 per cent.; Elizabeth, 12:8 per cent.; Lazarus, 14.1 per cent.; Bethanien, 13.5 per cent.; and Augusta, 12.3 per cent. In the last named institution Senator has charge of the medical wards, and he takes pains to show that the low mortality is not due to any favorable conditions of age, sex, or rank of the patients. As regards treatment, he has followed an expectant or symptomatic plan, while in the other four hospitals the cold bath has been used to a greater or less degree; in none, perhaps, to the extent which Brand directed, though in the Bethanien the system has been quite thoroughly enforced.

A comparison of the statistics of the five hospitals shows that the percentage of recoveries "has not been essentially influenced by the different special treatments in vogue." At the Augusta Hospital, no regular antipyretic method is employed; that is to say, the patient does not receive antipyretic treatment when the fever reaches a certain height, but the indication is always drawn from the general condition. The fever has not, as a symptom, the significance that Liebermeister and others suppose, and the changes in the nutrition of the organs do not depend on the high temperature alone. A study of tetanus teaches us that high temperature and the febrile process are two different things. Senator is not opposed to the cold bath; he believes that it has its uses, but as an antipyretic he places it far below quinine or antipyrine, which have also the advantage of being antiparasitic remedies. The bath does good, not so much by reducing the fever as by its action upon the nervous system; under its use the patient's mind becomes clearer and brighter; and another beneficial effect is upon the circulation and respiration, to both of which it is a powerful stimulus. If a rule is to be adopted, it should be that a cold bath is specially indicated in those cases with fever, stupor, and mental dulness—the febris nervosa stupida of the old writers. Statistics show very clearly that hemorrhage from the bowels is more likely to occur in this cold method of treatment, and that relapses are not more frequent.

In the discussion which followed the reading of Senator's paper at the Berlin Medical Society, Goltdammer, of the Bethanien, spoke of the difficulty of forming a clear judgment concerning therapeutic measures in typhoid fevers. So many factors have to be considered, of which the treatment is, perhaps, not the most important. The nursing, the relative proportion of light and severe cases, and the time of entrance into the hospital, influence the mortality to a very great degree. Thus, of the 3600 typhoid patients treated in the Bethanien during 17 years, the total mortality was only 12.8 per cent., but of the patients admitted in

the third week, or later, the death-rate was 36 per cent. GOLTDAMMER referred to the statistics of the Prussian army as illustrating the value of the cold bath in typhoid fever. Prior to 1865 the death-rate from this disease ranged from 20 to 25 per cent., but for the past nine years the mortality has been only 10.1 per cent. In the other European armies BRAND'S system is not fully carried out, and the death-rate still remains high, being 25 per cent. in the Austrian army, 28 to 36 per cent. in the Italian, and 86.5 per cent. in the French.

In hospital practice, the truth would seem to be that of 100 typhoid patients 75 will do well with careful nursing; of the remaining 25, from 10 to 15 will die under any method of treatment, while the fate of the remainder will depend very much on the skill with which the physician handles the therapeutic means at his disposal, of which, in certain cases, the cold bath is one of the most valuable.—*Med. News.*

ERYSIPELAS AND ITS TREATMENT.—Some of the commonest diseases are among the most instructive. Colds, if studied in their various degrees and distribution, would teach many a lesson of perverted action and its control. Functional nervous diseases, often so tiresome in their deceptive complexity, would attract and perhaps require attention in a greater measure than they now do if their processes were better known and more amenable to treatment. A more general if a simpler concern than in the latter instance attaches to the consideration of such a disease as erysipelas; the stages, causes, kinds, and cure explain themselves from day to day to each and every practitioner. There has been some confusion, nevertheless, with regard to the nature of erysipelas. Certain septic inoculations have been found to give rise to it and not others, and it has thus been laid under a sweeping accusation of septic origin, which is only partially justified. There can be no doubt that cases guiltless of any germ infection are very common, and that, as stated some time ago by MR. HUTCHINSON at the Hunterian Society, ordinary idiopathic erysipelas, in which no connection can be traced with gangrene, hospitalism, or any known contagious disease, is to be viewed as purely inflammatory and often of local origin. Heat, cold, or a mechanical irritant applied at the surface suffices to produce it. In a slight degree, and from these causes alone, this action surrounds the healthy wound and covers the acute abscess. Such cases are often mere colds in the skin, and are easily tractable when their primary character is early recognised and treated They are ever-present denials of the imagination that there is a specific germ of erysipelas. It is true that at a later stage, when bullæ have formed and burst, new septic powers may show themselves at the discharging spot. Such a result, however, is not to be dreaded under pure atmospheric conditions, and when it appears it is the sign of a break and a departure from the type of the morbid process till then operative. Infection has been implanted, but it is not initial. So far we have had to do, therefore, with mere vaso-motor disturbance and effusion—a state allied to catarrh, but beneath the skin, and maintained by the irritant effect of inflammation, which is itself the outcome of a mechanical force or a change of temperature. The advent of contagion at this or the primary stage (where a similar process is septic from the beginning) introduces peculiar conditions. Not only is there a causal difference; there is also a corresponding and a marked difference in the quality of the morbid change itself. More rapid and intense, quickly involving the deeper cellular tissue, soon followed by glandular swelling in the lines of lymphatic vessels, and by local subcutaneous abscess if allowed to go thus far, it exaggerates all the evidences of its simpler prototype and adds constitutional symptoms severer and more speedily severe. The morbid poison which is now at work is rapidly multiplying itself and infecting from its primary seat the whole course of the vascular system. Its own proper and contagious virulence is added to the irritation of inflammatory change, and its consequences are in proportion more hurtful and uncontrollable than in the idiopathic form of erysipelas. We have not spoken of such forms of this disease as arise from the presence in the surface lymphatics of non-vital poisonous matters. Here also the same anatomical structures as are involved in septicæmia are to a varying extent implicated. Cases of this kind show the same and glandular disturbances, the same tedious and painful course, and, though primarily far more hopeful, may, by involving deep parts in the diseased action, and by superadded infection from without, become septic and end fatally. There is not space at our disposal to discuss all possible points of treatment which arise out of these observations. From simpler cases in which the exciting cause is comparatively unimportant and easily removable, we pass to others in which it is the chief and constant factor, and is difficult to reach. From a state of mere vascular tension, which is most amenable to depressants, febrifuges, and local sedative applications, we must turn to conditions where antiseptics, tonics, opiates, stimulants, and the knife are the prevailing remedies. There has been too little recognition of the varied nature of erysipelas in its therapeutic history. The routine use of iron, tonics, and stimulants adhered to by some practitioners even in the earlier stages of the idiopathic variety, might be amended with advantage. A general use of iodine applications would be equally unwise, in our opinion, however advantageous in a later stage, when the integument is brawny and at parts broken by sloughing erosions. It should clearly be our first duty to seek out the primary excitant, and this will chiefly guide us in diagnosis of the type, and our judgment of the force, constitutional probabilities, and treatment of the disease.—*London Lancet.*

THE TREATMENT OF MYALGIA.—The indications for treatment are three-fold: (*a*) relief of pain, (*b*) physiological rest for the affected muscle, (*c*) restoration of the balance between the nutrition of the muscle and the work it has to do.

(*a*) Relief of pain is often secured by rest in a position that permits the complete relaxation

of the muscles involved. In acute cases, due to overwork pure and simple, and where complete rest is attainable, little other treatment is required. In the course of a few hours or days the function of the muscles is fully restored and their contractions are performed without pain. When, however, complete muscular relaxation is impracticable or fails to afford relief, anodynes are necessary. Morphine hypodermically is very useful, but this altogether independently of any local action. The continuous application of dry or moist heat by means of hot-water bags, flannels, poultices, spongiopiline, etc., is also useful. Anodyne lotions do good, and liniments containing aconite, belladonna, chloroform or chloral may be especially recommended, as may also the compound belladonna liniment of the British Pharmacopœia. Plasters of belladonna, conia, and menthol relieve pain. Galvanism occasionally gives prompt relief. The same statement may be made of static electricity. The pain sometimes disappears under gentle and long-continued massage.

(*b*) Rest is usually enforced, in some degree at least, by the intensity of the pain which attends movement. In severe cases rest in bed becomes a necessity. In affections of the respiratory muscles, as pleurodynia, firm support of the side by means of overlapping strips of plaster drawn from the spine forward and downward, in the direction of the ribs, to the medium line in front, is sometimes necessary and always comfortable.

(*c*) The balance of nutrition is restored by rest. Local means to further this end are such as to relieve pain—namely, heat, anodyne and stimulating frictions, massage and galvanism. The parts must be protected from sudden changes in temperature by extra thicknesses of flannel or sheets of wool or cotton batting, covered, if necessary, with a piece of oiled silk or fine gum cloth. In old cases, prolonged massage, with passive movements, and the slowly-interrupted galvanic current alternating with rapid faradic currents, are followed by good results.

As constitutional measures, a DOVER'S powder at night, followed by mild purgation in the morning, is often indicated. Purgation is especially called for in plethoric or gouty persons, in whom also Turkish or vapor baths are of good service; while poorly-nourished, anæmic subjects demand quinine, iron, lime, and cod-liver oil. If the attack linger, full doses of ammonium chloride, and, in old cases, of potassium iodide in moderate doses, well diluted and long-continued, are advocated; and in stubborn cases ANSTIE recommended deep acupuncture of the muscle near its tendinous attachment. In cases marked by a tendency to spastic rigidity, the repeated hypodermic injection of atropine may often be relied upon as the speediest means of cure. Where the general nutrition is poor, the local trouble is apt to be obstinate, and often yields only to measures that restore the general health.—DR. J. C. WILSON, in *Philadelphia Medical Times*, November 14th, 1885.

QUININE BY INUNCTION.—DR. WM. MOORE says, in the Peoria Medical Monthly: About one year ago I was called to see two children, one five and the other seven years of age, both suffering with malarial fever of a remittent type. I prescribed calomel and podophyllin in small doses every three hours until free catharsis was induced, alternating with liberal doses of quinine The little five-year-old boy took his medicine without grumbling, but the combined force of her parents, supplemented by the nurse's and my own efforts, failed to make the little seven-year-old girl swallow the medicine. While thinking about the advisability of a blister sprinkled with quinine, the thought obtruded itself: "Why not try inunction?"

Calling for some lard I incorporated a large quantity of quinine with it, at least three or four times as much as I should have given her in 24 hours, with directions to rub one-eighth of the mass thoroughly every three hours over the abdomen and inner surface of the thighs. I should have stated that the symptoms in the little girl were of far greater severity than those of her brother. I left promising to be there at the same hour the next day.

Judge of my surprise, when upon my return I found the patient without fever and getting along nicely. I prescribed the same treatment for the next 24 hours. I found her little brother with fever yet. Although the remission was wellmar ked. I went back on the third day and found the little girl convalescing rapidly, while the little boy, who continued to take his medicine *per os*, ran on until the fifth day before his fever "broke." I have had occasion twice since then to resort to the same method, each time with like result, although not quite so promptly.—*Med. Digest.*

TREATMENT OF CATARRHAL PHTHISIS, OF HÆMOPTYSIS, AND OF CHRONIC BRONCHITIS BY TERPENE.—PROF. GERMAIN SEE gives the following résumé of his paper on this subject:

1. It diminishes and quickly arrests purulent expectoration in catarrhal forms of phthisis. Whether the muco-purulent secretions proceed from the bronchi, irritated by tubercles, or from the walls of pulmonary cavities; whether the malady is at an early stage, or at a phase of purulent breaking down, or even of cavities already formed; terpene should be used whenever the formation of pus is sufficiently abundant to tire the patient, to exhaust the strength, or to cause him to waste away.

2. It should be used with success in the hæmoptysis of the early stages of tuberculosis; that is to say when the disease has not yet developed large cavities, with aneurisms of the pulmonary arteries.

3. In the treatment of pulmonary catarrhs; of chronic bronchitis not dependent on asthma, and only producing dyspnœa by choking the bronchi, terpene constitutes the best method of lessening bronchial hypersecretion.

4. The action is quick, sure, and free from physiological inconveniences, rendering it preferable to preparations of syrups of turpentine or tar, or of shoots of pine, which contain so little of it; and to essence of turpentine, which is not tolerated. It even offers advantages over creasote, on account of its perfect innocuity and easy digestion.

5. The best way of administering this medi-

cine is either in the form of pills or tincture, and the best dose is one gramme.

6. In catarrhal, or emphysematous, or nervous asthma, which is to be distinguished from primary catarrh, iodine and pyridine have an incontestable superiority.—*Bulletin de l' Académie de Médicine.*

Iodoform in Gout.—Prof. Testa (Gazz. Med. di Torino, 1885) recommends the use of iodoform in gout. From several experiments and clinical observations, he arrives at the following conclusions:

1. Iodoform augments the daily excretions of urea, while it accelerates the organic changes of matter and the process of oxidation.

2. The quantity of uric acid which is excreted daily with the urine, under the use of highly nitrogenized food, is diminished, inasmuch as, through acceleration of the process of oxidation, the conversion of uric acid into urea is increased.

3. Oxaluria is diminished through conversion of the oxalic acid into carbonic acid and water.

4. In gout, the amount of uric acid in the blood is diminished through an increase of the organic changes

5 Hence, iodoform is to be regarded as a rational remedy, fulfilling the primary indication in gout.

The quantity of iodoform given daily by Dr. Testa amounted to from sixteen to twenty centigrammes (1½ to 3 grains). In seven cases of gout in which it was given, the paroxysms became less frequent, and their intensity and duration were reduced It appears, however, to be contra indicated, or at least to require great caution in its use, in cases where gout is complicated with an affection of the kidneys. *London Medical Record.*

Danaine.—At the séance of the Académie Française, held on November 9th, MM. Edourd Heckel and F. Schladenhoffen gave a detailed description of a vulnerary obtained from the islands of Réunion, Maurice, Rodriguez, and Madagascar, named by the French colonists Diane jaune or Liane bœuf. Its botanical name is Danais fragrans. It belongs to the natural order Rubiacæ, and is a quickly growing climbing plant, the root of which when fresh exudes abundantly a beautiful yellow juice. From time immemorial it has been employed as an excellent vulnerary in the Mascarene Islands. The fresh juice is applied to wounds, and causes rapid cicatrisation. The decoction of the root is also employed as a tonic and a febrifuge. The authors of the paper have investsgated the alkaloid of the root to which M. Bourdon, in his inaugural thesis, gave the name of Danaïdine. They find that the medicinal agent is a substance to which they have applied the term Danaine. It is colored yellow, and has been known from remote times as a dye.—*London Lancet.*

Method of Administration of Hypnone.—Vigier, to whom Dujardin-Beaumetz presented a large quantity of hypnone for experiment, makes the following report:

Hypnone is very sparingly soluble in water, and but slightly soluble in glycerin. Its solubility in alcohol permits the establishment of the following formula:

Hypnone, gtt. j.
Alcohol fortior, gtt. xvj.
Syrup of wild cherry, gtt. xvj.
Syrup of orange-flowers, f ʒ j.

Add the hypnone to the alcohol, then add the syrups, mix, and preserve in a stoppered bottle.

The amount of hypnone necessary to induce sleep varies from four to ten drops, taken at one dose. Fractional doses are not efficient.—*Gaz. Hebd. de Med. et de Chirurgie*, Nov. 27th, 1885.

Chaulmoogra Oil in Chronic Squamous Eczema.—Dr. W. L. Chew reports, in the New Orleans Medical and Surgical Journal, a case of chronic universal squamous eczema cured by this remedy. The patient had been treated with iron, arsenic, cod-liver oil, etc., with but slight improvement. The oil was then given in two- or three-drop doses, and increased to ten to fifteen drops three times a day. The best vehicle was found to be a goblet of sweetened cream. The oil was also used in the form of an ointment.

Chaulmoogra oil, ʒ ii.
Glycerin, ʒ iv.

To be rubbed over the body and limbs, and the cold shower-bath applied three or four times a day.

In fifteen days all the exudation had been checked; on the nineteenth day the case was discharged cured.—*Louisville Med. News.*

Treatment of Psoriasis by Medicated Plasters.—The medicated plasters constitute a neat and convenient method for the treatment of psoriasis, which has an additional advantage in that it may be carried out by the physician himself.

The applications require to be renewed less frequently than when simple inunctions are employed. Th y are usually contra-indicated if the disease is seated on the face or scalp.

The chrysophanic plasters appear to be as efficacious in cases of psoriasis as the ointment compounded of the same agent, while unpleasant symptoms are less liable to be occasioned by their use. The average duration of treatment with the plasters is about three weeks.

They exert no influence in the prevention of relapses.

Pyrogallic acid plasters are less serviceable than those of chrysophanic acid.—J. Bellan, *Thèse de Paris*, 1884.

Dry Dressings for Eczemas.—Dr. Thomas C. Smith, of Washington, in a recent paper read before the Medical Society of the District of Columbia, advocated the use of absorbent powder in cases of eczema facialis and capitis, excoriations, deep varicose ulcers of the leg, etc. The general formula for such a powder, with such variations, of course, as may be indicated, is as follows:

℞ Zinci oxyd., ʒ iv.
Acid. tannic., ʒ ss.
Acid. carbolic. cryst., gr. viij.
Amyl. pulv., ʒ iii.
M.

Boracic acid is sometimes used, but bismuth seldom. The crusts are not to be removed by poultices or water, but the powder is to be applied freely to its edges. Warm water is to be used for cleansing purposes.—*London Lancet.*

Chloride of Gold and Sodium in Pertussis.—Dr. G. L. Magruder, of Washington, D. C., reports in the American Journal of Obstetrics successful results from the use of chloride of gold and sodium in pertussis. His formula was:

℞ Auri et sodii chlorid., gr. ij.
Aq. destil., ʒ j.

With directions to give five drops every two hours, beginning as soon as possible.—*Med. and Surg. Reporter*, Jan., '86.

Peroxide of Hydrogen in Epilepsy.—Among the many suggestive hints given by Dr. B. W. Richardson in the Opuscula Practica of the Asclepiad, he speaks of the benefit he has derived in many cases from the use of peroxide of hydrogen in epilepsy, and states his conviction that the drug demands a more extended trial than it has hitherto had The dose is a drachm of the ten-volume solution, given thrice a day in half a tumbler of water, gradually increasing the quantity to two or three drachms. A drachm of glycerin added to each dose reduces the metallic taste.—*London Medical Record.*

A Powerful Hæmostatic.—A curious and interesting discovery is reported to have been made in Columbia, which, if confirmed, will be valuable to surgeons. A shrub which is called there "aliza" exudes a juice which is so powerful a hæmostatic that when a knife is smeared with it, and used for operating purposes, the largest vessels may be severed without any hæmorrhage. It is also stated in the South American medical journal from which we quote that hæmorrhage (epistaxis?) is produced by inhaling the scent of the female plant.—*London Lancet.*

The Treatment of Sick Headache.—Dr. W. Gill Wylie (N. Y. Med. Jour.), of New York, has produced excellent results with the following treatment: So soon as the first pain is felt, the patient is to take a pill or capsule containing one grain of inspissated ox gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick headache, as such, is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.

The Comparative Merit of the New Antipyretics.—At a recent debate on this subject by the Paris Academy of Medicine, it was agreed that of the three new antipyretics—antipyrine, kairine, and thalline—the first merits preference; that all three reduce the temperature, but that antipyrine has the least disagreeable effects, and that none of the three drugs is able to change the character or the course of the disease, or to influence the prognosis in the least.

Ichthyol.—Dr. Lorenz recommends ichthyol in a variety of cases. In a thirty-per-cent. solution, it relieves the severe itching of senile prurigo; for pruritus, a weaker solution is used, namely, ten-per-cent. As an application to slowly granuating burns and ulcers, he has had excellent results; and internally, in doses of four tablespoonfuls of a one-per-cent. solution in the day, he has relieved the symptoms—vomiting, etc.—of catarrh of the stomach.—*Brit. Med. Journal*, Jan. 23, 1886.

A New Remedy for Hiccough.—Dr. O. T. Shultz, of Mt. Vernon, Indiana (American Practitioner), relates a case of hiccough of nine days' duration, which yielded on the morning of tenth day to one drop of a one-per-cent. solution of nitro-glycerine, and repeated in an hour. The remedy was continued at intervals of two hours—gradually extended. On the twelfth day permanent relief was obtained, and treatment discontinued.—*Buffalo Med. and Surg. Journal.*

Russian Remedy for Hydrophobia.—The alisma, or water plantain, is lauded in Russia as a remedy for hydrophobia. The plant flowers during the summer, and should be collected during August. The roots must be dried and grated, then spread on bread and butter, and a good dose taken night and morning. Two or three doses are said to be sufficient to effect a cure.—*London Lancet*, Jan. 2, 1886.

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Original Articles.

CREMATION AND THE MEDICAL PROFESSION.*

BY HUGO ERICHSEN, M. D., DETROIT, MICH.†

Some time ago, shortly before I began the cremation movement in this city, I was conversing with a physician, a former fellow-student of mine, on the subject of incineration. In the course of our talk it transpired that he was of the opinion which, it is needless to say, I did not share, that a doctor of medicine had no business to meddle with cremation, that any endorsement of it would be sure to injure his practice; that, in fine, it was one of those topics which one had better leave alone.

Looking at the matter from a business standpoint, I believe my colleague was right, but taking into consideration the duty we owe to our fellow-man, who places his health and life in our hands, I sincerely believe that he was way off, as the common expression goes.

Stripping the cremation question of its religious and sentimental aspects, which are worthy of no consideration whatever, it will be readily seen that it is simply a hygienic measure, salutary to the living, and opposed only because it is an innovation. In the far-away Alaska, where the natives burn their dead on pyres, missionaries are attempting to do away with cremation and wish to introduce interment in its stead. So far they have failed to accomplish their object, owing to the resistance of the Alaskans who adhere pertinaciously to a custom which they have practiced for hundreds of years, and which they have found preferable to burial in the frozen soil of the whilom Russian province. Most likely these Indians were compelled to adopt their rude, yet efficient mode of cremation by some terrible pestilence which decimated their numbers, killing chief and slave alike; they probably observed that the plague was communicated to the living by the bodies of the dead, and wisely resolved to destroy them, and so came to build funereal piles and to execute cremation. Of this means of protection the christian gentlemen now in their midst are trying to rob them. If they would, instead, turn their attention to the erection of suitable crematories, their efforts, I am quite sure, would be attended by success. The form of earth-burial could be retained and services held in the crematory before the body is committed to the furnace; in this wise the purpose of the Alaskan clergy, which is, after all, the establishment of the christian religion in the new territory, would be more speedily attained.

As I have already said, I believe that the disciple of Æsculapius who, prompted by his love for the almighty dollar, gave it as his opinion that medical men should forbear taking an active part in the cremation movement, now going on not only in America but all over the world, is greatly mistaken. The facts which I will lay before you to-night will fully bear out my assertion. In my remarks I will altogether refrain from alluding to the sentimental and religious features of the question, and will confine myself entirely to the scientifie ones.

Recently a petition in favor of optional cremation, bearing 23,000 signatures, was presented to the German Reichstag by PROF. GREVE, M. D., and championed in that august body by no less a person than RUDOLF VIRCHOW, the eminent pathologist. Of the names that were on that petition 1,942 were those of physicians, and ten were subscribed by clergymen. If medical men have no right to promote a sanitary reform, I should like to know who has. I will make no use of the logic of the doctor who jumped up in a London medical club, during a debate on incineration and cried: "If we earn our living, why should we not urn our dead?" but will present sounder argument. The leaders of the cremation movement, now sweeping over the whole civilized world, are physicians. Although the emperor of Brazil is a cremationist, the prime mover in the reform now progressing so favorably in that tropic country is DR. FREIRE, a professor in the University of Rio de Janeiro, and the discoverer of the yellow fever bacilli. In Denmark DR. LEVISON, of Copenhagen, stands at the head of the cremationists. Most of the inventors of the Italian furnaces were physicians, and, almost without exception, the presidents of the cremation societies of the sunny land are knights of the scalpel and lancet. DR. GAETANO PINI, of Milan, who, as I will mention in passing, is the author of that excellent book "La Crémation en Italie et l'étranger," is one

* Read before the Detroit Medical and Library Association, Feb. 1, 1886.

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of the most indefatigable cremationists, and deserves great praise for his incessant endeavors to advance the cause. A doctor of medicine—P. DE PIETRA-SANTA—is the recognized head of the French cremation party, while DR. EUGENE JANSSENS is foremost among the incinerationists of Belgium. DR. BENKENDORFF, the president of the Berlin Cremation Society, which has an exceedingly large membership, is a physician. In England that celebrated surgeon and savant, SIR HENRY THOMPSON, Bart., Surgeon Extraordinary to his majesty the king of the Belgians, and Professor at the Royal College of Surgeons, is the enlightened advocate of a practice prevalent in ancient times, but long abandoned, to the great detriment of mankind. In London dwells another cremationist of note—SIR SPENCER WELLS, of whose remarkable ovariotomies you all have heard. Physicians are the most ardent cremationists in Russia, Sweden (whose cultured king, by the way, believes in the reform), Greece, Spain, Hungary, and Portugal, and if you will take the trouble to investigate who founded the various cremation societies in the United States, you will find that they were organized by medical men. As you all know, the first furnace that was ever built in the Union was erected by DR. JULIUS LE MOYNE, an aged physician of Washington, Pa. Honor to his memory. The inventor of the cinerary apparatus at Lancaster, Pa., DR. M. L. DAVIS, is also one of those whose holy office it is to comfort the dying and heal the sick. The impression which the cremation of PROF. SAMUEL D. GROSS, the illustrious surgeon made, is not yet forgotten in the medical world. And when we look toward that land where the only North American knights and baronets reside, we again find that the agitation in favor of cremation is carried on by practitioners of medicine. In Toronto, where a crematorium is to be erected this spring, DR. C. W. COVERNTON stands at the head of the cremationists. Incineration is a most ancient practice. Some authors ascribe its origin to the sun-worship of the Phœnicians, while others think it was derived from the self-immolation of Hercules. DR. LE MOYNE, the old gentleman whom I have already mentioned, asserted that the first authenticated case of cremation was the proposed incineration of ISAAC, and that, although it was not consummated, it was fully authorized by the Deity. In consequence, he argues that cremationists stand in the shadow of the LORD, and that any one who opposes them commits a sacrilege. The exact date, as appears from what I have said, when cremation was first executed on earth, is not known, but, according to the records which have been handed down to us, it dates back about 2,000 years. I do not believe that incineration, as some of its antagonists have imputed, had its origin in a heathen religion, but I am quite certain, from existing evidence, that it was originally resorted to upon sanitary grounds, and as a means to protect the living against corruption. From the earliest times burning was practiced in the interior of Asia; and in the western world, it was followed by the Thracians, by the Celta, and other nations. In fact, at one time it was universal, and practiced from the tropics to the extreme north. The bible states that SAUL and his sons were burned, and that in great plagues, as in the Vale of Tophet, the bodies were cremated for hygienic reasons. In the Greece of old, as all know who lay claim to classical knowledge, incineration was extensively practiced. HOMER'S narration of the burning of PATROCLUS gives such an accurate description of the method then in use, that I will be pardoned for quoting it here. The passage to which I refer occurs in the twenty-third book of the "Iliad," and is as follows:

"They who had the dead in charge
Remained, and heaped the wood and built a pyre
A hundred feet each way from side to side.
With sorrowful hearts they raised and laid the corpse
Upon the summit. Then they flayed and dressed
Before it many fatlings of the flock,
And oxen with curved feet and crooked horns.
From these magnanimous ACHILLES took
The fat, and covered with it carefully
The dead from head to foot. Beside the bier
And leaning toward it, jars of honey and oil
He placed, and flung, with many a deep-drawn sigh,
Twelve high-necked steeds upon the pile. Nine hounds
There were, which from the tables of the prince
Were daily fed; of these ACHILLES struck
The heads from two, and laid them on the wood,
And after these, and last, twelve gallant sons
Of the brave Trojans, butchered by the sword;
For he was bent on evil. To the pile
He put the iron violence of fire,
And, wailing, called by name the friend he loved.
* * * * * * *
* * They quenched with dark red wine
The pyre, where'er the flames had spread, and where
Lay the deep ashes: then, with many tears,
Gathered the white bones of their gentle friend,

And laid them in a golden vase, wrapped round
With caul, a double fold. Within the tents
They placed them softly, wrapped in delicate lawn
Then drew a circle for the sepulchre,
And, laying its foundations to enclose
The pyre, they heaped the earth, and, having reared
A mound, withdrew."

These lines are from WILLIAM CULLEN BRYANT'S translation of the "Iliad," and give one a very good idea of the cineration of a warrior. In times of peace the favorite animals of the deceased were placed with him on the funeral pile, and he was covered with costly robes and rugs. The extravagance at funerals finally became so great among the Greeks that special laws had to be enacted to put a stop to it.

From Greece, by way of Latium, cremation reached Rome, where it was practiced from the time of the republic down to the fourth century. The process at Rome was substantially the same as that made use of at Athens—the pyre being resorted to in either case, only the ashes were disposed of differently in the city of the CÆSARS, being placed in upright urns, while in Greece the urns lay horizontally on the ground and were covered with rugs. In Greece the ashes were preserved in beautiful mortuary chambers in the houses, a custom that also obtained at Rome, where, however, columbaria were also maintained at public expense. These columbaria were subterranean chambers which served to hold the ashes of the deceased, the urns being deposited in niches, hewn out in the rock for the purpose. The rare beauty of these columbaria, which may yet be seen in the eternal city, led NATHANIEL HAWTHORNE, our great romancer, to exclaim that he would not object to being decently pigeon-holed in a Roman tomb. The last funeral fires in Rome expired late in the fourth century, but in countries situated further north the custom of cremation was not abolished before 1300, A. D.

In Hindostan the ancient mode of incineration is yet carried out by millions of people; the arrangement being the simplest form of pyre, and the only difference of cost lying in the class of wood employed. Efforts have been made by the government to introduce suitable apparatuses for burning the dead, but the Hindoos still cling tenaciously to the primitive custom of their forefathers. The furnaces are used only by the more intelligent Brahmins.

In Japan the practice of cremation was common from the earliest times, and prevails yet to-day. Some of the mikados were burned. There is a crematorium in Kioto; generally, however, the corpses are cremated on wooden faggots. The ingenious Japanese contrive to concentrate the heat, and save fuel at the same time, by covering the dead with a straw mat which has been previously thoroughly moistened with salt water.

The first plea for cremation in modern times was made 288 years ago, by SIR THOMAS BROWNE, a learned and respected practitioner of medicine in England, a plea at once so brilliant and erudite that it has been classed among standard literature ever since. From that time until 1873 incineration was advocated by enlightened individuals, mostly physicians. But the cremation which they had in view was that on the pyre, a method little less barbaric than interment. Hence, the agitation carried on so energetically had few practical results. Notable among these is the incineration of the poet SHELLEY, and his friend, WILLIAMS, who were burned by LORD BYRON, TRELAWNY, and LEIGH HUNT.

In 1873, however, PROFESSOR BRUNETTI, of Padua, Italy, made experiments which led to the construction of the first crematory furnace and thus *scientific cremation* was inaugurated. The results of BRUNETTI'S experiments were exhibited at the Vienna Exposition, where they attracted great attention. From there the reform, that is the burning of the dead in a scientific way, spread like wildfire to all countries and continued to propagate. At present it has reached some of the remote parts of the globe, being advocated in South America, Australia and South Africa.

This, briefly, is the history of cremation; and the most ardent antagonist of incineration must admit that it does not verify the assertions of those who claim that the cremation movement is a craze. It does not take over two hundred years, gentlemen, to realize a craze. The best illustration of my averment is the recent *roller* skating mania when even doctors—I among them—so far forgot their professional dignity as to try their luck on wheels. Some persons have faintly hinted—very faintly, when a medical athlete was near—that we frequented the rinks to secure fracture cases, but I brand this imputation as a base calumny. The fact that cremation progresses slowly, but surely, is sufficient to demonstrate that it is a veritable reform, destined to become almost if not quite universal in the days to come.

When cremation was advocated for the first time in this country, in 1874, it was met with a storm of ridicule and violent opposition. A Persian gentleman, then residing in New York City, who wanted to burn the remains of his dead wife, was personally assaulted by an ignorant mob and compelled to resort to inhumation. What a wonderful change has taken place since then. No longer are cremationists considered cranks, and the fact that incineration is making such rapid strides forward shows beyond a doubt that their ideas are permeating

the masses. A good deal of the fanaticism opposed to the reform has evaporated, leaving the sulphur with which it was loaded.

Why should we desire to substitute cremation for burial in the earth? There are many reasons. I need not search for proof as to the advisability of such a substitution in the records of the past, but am enabled to illustrate my remarks by recent occurrences which were reported in our daily papers. In the first place a large area of land is lost to agriculture by earth-burial, and what might be food producing soil becomes a vast breeding-place of pestilence.

Again, cemeteries are soon overcrowded and all concomitant results of such a state soon follow. I have calculated that the space in this city which was until recently occupied by the Music Hall, Brush and Ferry buildings would give ample room for a columbarium and crematorium that might be used by all the inhabitants of Detroit for nearly 200 years. How long would the same space do as a burial-ground? Certainly not over 50 years, perhaps only 25.

Graves are not houses which last till doomsday. In this country where cities grow so rapidly, graveyards are soon surrounded by dwellings, and a cemetery which was once far outside of the city-limits finally is almost in the center of the city. It then becomes necessary to remove the dead. They are dug up and carted away, and are, perhaps, quietly dumped into some swamp to fill it up and assist in the generation of malaria. Business blocks are then erected in the place that was once sacred to the dead, and the peace of the burial-ground is changed for the din of traffic.

The following citation from an editorial of the Detroit Free Press will serve to elucidate what I have said:

"The interment of the numerous dead of a large population in the midst of a large population, is very serious. To it are attributed the constant outbreaks of cholera in India, and the increase of leprosy in China; and it is certain as anything can be, that the existence of cemeteries in crowded communities is meeting with an increasing prejudice.

"The people of large cities are already forced to seek at some distance from their limits, suitable places for interment. And the existence of great cemeteries in the suburban communities themselves is provoking vigorous opposition.

"At Newton, Long Island, there are thirteen cemeteries, in which 30,000 bodies of people dying in New York and Brooklyn are buried annually. There are, therefore, 60,000 live people in one part of the town, the rest being occupied by 350,000 dead ones. Property is depreciating and taxes are increasing. People are not attracted to a town of this sort, and the real estate of the village has been falling in value for some time."

But the financial deterioration is nothing when compared with the effect which the aggregation of many dead produces upon the health of the surrounding population. The gases which an overcrowded graveyard emits are dangerous to human life, and when inhaled may produce severe throat diseases, malaria, diarrhœa, dysentery, or typhoid fever. A lady residing in the vicinity of Elmwood cemetery tells me that on certain days she can distinctly perceive the odor of the dead, only, of course, when the wind wafts it in the direction of her habitation. It is only a question of time, when this burial ground, which, by the way, is already enclosed by houses, must be removed.

Beside air, water is contaminated by graveyard emanations. This is illustrated by the cemetery at Nyack, N. Y., which is polluting the water of the ponds and wells of the village. Not long ago the Evening News of this city declared that the wells in the neighborhood of Woodmere cemetery do not catch the water until after it has been filtered through the thousands of graves in the cemetery filled with decaying bodies, and that no water is obtained in the vicinity which is not discolored and has a brackish taste. After a heavy rain the impurities are most pronounced.

The residents of Woodmere have long ago given over the use of water as a beverage. I don't blame them. I wouldn't like to drink fluid extract of dead man myself.

It cannot be denied that infectious diseases, such as cholera, diphtheria, scarlatina, typhus and small-pox, can be communicated to the living by the dead. Two girls in the interior of this State, one of whom was a visitor from Vermont, entered a vault in the cemetery and inspected a coffin containing the body of a woman supposed to have died of malignant jaundice. On the following day the young lady from the green mountains departed for home. Within a week both she and the Michigan girl were attacked by diphtheria which speedily proved fatal. When the death of the woman whose coffin the unfortunates had seen, was investigated, it was found that it was due to diphtheria.

During the late small-pox epidemic the grave digger of St. Sulpice, a village near Montreal, dug a grave next to that of a man who had died of the scourge a month before, and who had been the last case of small-pox in the village. On the next day the man who had put so many to bed with his shovel was attacked by the plague to which he succumbed in a short time. By him the dread disease was again introduced into the village, attended by great mortality.

These cases are derived from the Evening News, which reported them at the time.

Since every crematorium is provided with a calidarium it does away with burial alive—an advantage that cannot be overestimated.

Incineration, of course, forever puts a stop to the desecration of the dead. The grave-robber will be thrown out of employment, a fact that not many will deplore.

Certain objections have been raised to the reform. Leaving aside the religious one, which is pronounced invalid by such men as ARCHDEACON FARRAR, HEBER NEWTON, and the Bishop of Manchester, I will take them up one by one and dispose of them briefly.

It is urged that the exhalations of cremation are unwholesome. But then, there are no exhalations. The enemies of incineration will please remember that the gases from the corpse must repeatedly pass through an intense heat and improved smoke consumers before they are liberated. Thirty jars of the gases escaping from the Lancaster crematorium were recently analysed by a chemist and found to be perfectly harmless.

It is claimed that the burning of the dead would destroy the evidence of poisoning. But when I tell you that every crematorium now in existence requires the certificates of two reputable physicians to the effect that the person about to be cremated died in a natural way, and when such testimony is not forthcoming insists upon a careful autopsy, you will perceive that the objection is groundless. In addition we must remember that the mineral poisons can yet be detected in the ashes and that the vegetable poisons soon decompose with the body. Modern researches have shown that putrefactive fermentation in decaying animal matter gives rise to the formation of sepsine and other alkaloids, which are called ptomaines and some of which are intensely poisonous. When we take into consideration that our burial laws are exceedingly lax, and bear in mind that one can easily get a corpse filled up with arsenic by the embalming process of the undertakers before the officers of justice have a chance to investigate, it is plain that the poisoner has every opportunity to escape the penalty of his crime.

And finally the anti-cremationists assert that the universal practice of incineration would rob the earth of its supply of ammonia, and would in the course of time, cause an ammonia famine. This favorite theory of DR. MOHR, of Bonn, Germany, was refuted by the professor of chemistry at the University of Leyden, Holland. Thirteen of the most prominent chemists of Europe concurred in the opinion given by him. The gentlemen of the opposition had forgotten that ammonia can be manufactured artificially, and that nature derives a far greater supply of ammonia from decaying animals and vegetables than it ever will from humanity.

These are the principal arguments against cremation. If you will think over my answers to them you cannot dispute their invalidity. As the time at my disposal is drawing to a close, I will not go into details as regards the methods of burning the dead which are now in use. Incineration is achieved in some furnaces by means of gas, in others by hot air, and in one apparatus—that of Gorine—the flames come into contact with the body. The minimum time in which a corpse can be reduced to ashes is a little less than one hour. It will, no doubt, be reduced to one quarter of an hour in the future.

When we consider that cremation destroys instantly all infectious quality in the body submitted to the process and that, moreover, it is nature's method, our duty as medical men is clear. Hygienists of the present time are not always physicians; but physicians must always be sanitarians, and as such they are in duty bound to become exponents of incineration and to advocate it whenever and wherever they can.

The question of modern cremation is yet in its infancy, but although its star is ascending, it needs all the assistance it can obtain and that assistance must be rendered primarily by practitioners of the healing art.

CLINICAL LECTURE.*

BY PROFESSOR ROBERTS BARTHOLOW, M. D., OF PHILADELPHIA.

UNILATERAL SWEATING.—The first case that I bring before you to-day, gentlemen, is that of a man who has an affection of the heart. I can hear a loud murmur with the first sound of the heart, which is so diffused that it can be heard all over the chest; it is a musical, ringing murmur. Now while this condition of the heart is of interest, I have brought the man before you more especially to call attention to a very curious disease that he has, namely, a condition of sweating of one half of the head. A while ago, when he first came into the hospital, somewhat heated from walking on this spring-like day, the condition was very marked, the sweat standing out in great beads on one side of his head. He has been sitting in a cool place with the air blowing over his head, so that it is now much less marked, but you can still notice a decided difference in the degree of moisture of the two sides of the head. And it is to be also noted that there is an abrupt line at the centre of the head separating these two conditions. Now, this case is of very great interest, not alone on account of its great

* Delivered in the Hospital of the Jefferson Medical College, February 15th.

rarity, but in so far as it may be significant of other and more serious conditions. When we have this phenomenon of unilateral sweating it may be a symptom of one of several conditions. I will now examine this man's pupils, for you will often find them affected and when you do you will be able to arrive more nearly at the diagnosis of the condition causing the sweating. There is no difference between the pupils here, but let us suppose, for the sake of of illustration, that there was a marked difference, that one was widely dilated, what would we conclude from this? Well now, we know that the radiating fibres of the iris derive their power to act from the sympathetic nervous system, while the nerve supply of the circular fibre is derived from the third nerve. Hence if we had dilatation we would know that there was some agent at work that caused more or less stimulation of the sympathetic. So that you can understand how this fact would enable us to locate the lesion, for where the condition is due to this cause the lesion must be located in the head or about the centre of the body, as in the thorax or the neck, for if it were located farther down we would not have these particular fibres involved. Tumors in the thorax are not infrequently the cause of this condition, and the most common form of tumor giving rise to unilateral sweating is an aneurism of the aorta, causing pressure on the nerve. But we have no disparity in the pupils here, hence we must exclude the most usual cause of this condition. While there is a marked cardiac lesion, as I have already told you, yet when we explore the thoracic organs we fail to find any aneurism or other kind of tumor. Now then is there any other condition that will give rise to unilateral sweating? We may have sweating of one entire half of the body, or of one limb or of a certain part, and such a condition may be sometimes dependent upon indigestion. In such cases we have a right to assume that the causative agent manifests itself through the agency of the sympathetic, but just how it so acts or why, the intimate mechanism of the process, we cannot comprehend.

Well now, how can we obviate this condition, which in some cases will cause a great deal of distress? I once had a patient so afflicted, where the least excitement, such as going into a church or a theatre, or any emotion, would cause enormous beads of perspiration to stand out on one side of his head and, to him, this affliction was a source of the greatest mortification. It will not do to make light of such cases, for they are real and serious to the patient, and if you do not make an effort to relieve them, they will seek the advice of some one who will. The indications for treatment are to use locally such drugs as will have a tendency to check the action of the sweat glands, and of these we can use the extract of belladonna, or a solution of atropine. Internally we may use such remedies as are sweat-producers, and for this purpose we can recommend pilocarpine. This seems like rank homœopathy, but it is not, for the remedy is really opposite to, it is antagonistic to the condition of disease. There is a physical law in support of this method of medication, which is that two bodies cannot be active in the same place at the same time; if one wave meets another wave, the force of each is broken and a calm ensues; two forces cannot be operative at the same time in the same place. But physiological data are enough to warrant us in using pilocarpine in this disease. We do not need to search out physiological laws for that which clinical experience demonstrates to us is correct. In this case we will commence with the local use of belladonna.

THE TREATMENT OF EPILEPSY.

Here is a case that will illustrate some of the unpleasant consequences of epilepsy. When this woman was 19 years old, she became subject to attacks of what she very correctly denominated "faintness;" she did not then have real, true epilepsy, but she did have attacks of "goneness," of what is usually called "petit mal." These seizures gradually increased in severity until they blossomed out into full-fledged epilepsy. A few months ago, while she had a kettle of boiling water in her hand, she had one of these attacks, when she fell and severely burnt her face, as you see by this disfiguring scar that has resulted. She has, then, true epilepsy now, "grand mal," the seizures occur in the day time, sometimes two or three in the course of one day. She has had a great deal of treatment, but, as usually happens in these cases, the treatment has not been persistently carried out. She would for a time take her medicine, as ordered, and then concluding that it was doing her no good, discontinue its use. She went from one doctor to another, all the time growing worse, and at the present time, she tells us, that the attacks occur very frequently. Now, it is very important that you remember that I have said that the convulsions are diurnal; this makes a very great difference in our prognosis. When you have a case where the patient tells you that the attacks occur exclusively at night, then you will know that you have the very worst type of case to try to influence by treatment, while, on the other hand, when they occur in the day-time we have good reason to hope that by appropriate treatment we can do much to hold them in check. Again, another important feature is that these seizures are very pronounced, for in such cases treatment will be of much more avail than in those cases of epileptiform seizures, of Jacksonian epilepsy, which rather tend to indicate the existence of some local lesion.

In this case the convulsions come on without any warning, are very violent, and affect the whole body. So then I would say that, other things being equal, we have here a manageable case. As to treatment, I would say that far above all other therapeutic measures, I would place the regulation of the diet. I cannot lay too much stress on this subject, for without due attention to it, all our other measures will be absolutely of no avail. I recently had a case of epilepsy occurring in one of the most anæmic women I ever saw; this woman, as you see, is also anæmic, but the former case was infinitely more so. I regulated her diet rigidly and I assure you that the convulsions did not occur until she disobeyed my injunctions and returned to her former diet. This was a most striking illustration of the power of diet in regulating epilepsy. This woman has been dieted, I am told, but I must say, in a very injudicious and unwise manner. It is true that she has been forbidden to eat pork and beans, and cabbage, and a few similar articles, but in their place, she has been allowed tea, crackers, but little animal food and no vegetables. In the other case, to which I have referred, the patient had been using a similar diet and was suffering terribly from acid indigestion; she, however, was wont to consume considerable animal food. When I placed her upon a rigid milk diet, an eminent physician in central New York, where she belonged, expressed great surprise, for he had never heard of this method of treating epilepsy. However, for some months she had no convulsions, and when they did recur, it was only after a return to her former diet. This was four or five years ago, and only recently I had a letter from her in which she tells me that so long as she follows my advice about diet, she is nearly entirely free from convulsions. Thus, then, you can appreciate how very important is this regulation of the diet. If you can get the patient's consent and co-operation you will often derive most excellent results from an exclusive milk diet.

Such a course should be prescribed here, and I have no doubt that if the patient will consent, the improvement will be very marked. This anæmia that I have told you was quite marked, is not due to any deficiency of food; on the contrary, it is due rather to an excess than a lack of food; the system cannot dispose of all that it takes in. But if she confined herself to milk, it would all be assimilated and she would soon cease to be anæmic. After confining herself strictly to milk for a few months, she might cautiously introduce some solid food into her dietary and very carefully watch the effect. If the convulsions become more frequent, the offending article should be at once expurged from the list, and she should again fall back to the milk. I would say that if you hope to successfully handle these cases, milk should form the chief article of diet for years. The patient must co-operate with the physician, and though your directions may seem irksome, the patient should be made to thoroughly understand that her only salvation depends upon a rigorous observance of them. When viewed in this light, epilepsy, while still a terrible disease, is yet shorn of some of its horrors when one realizes that he has it in his own hands, in some cases, at least, to hold the disease in check. In true, essential epilepsy, to repeat that I may be the more impressive, I cannot too strongly urge upon you the importance of regulating the diet.

As for drugs, we have a right, in such a case as this, to hope for very good results from the use of the bromides combined with calumba. I would give, in this case, one-half drachm of the bromide of sodium, two scruples of the bromide of potassium, ten grains of the bromide of ammonium, two minims of the liquor potassii arsenitis, and one teaspoonful of tincture of calumba. Well, now, how long should you continue the use of these drugs? for that is a question of very great importance. They should be continued until the characteristic effect of the bromides on the fauces is produced, and this effect should be maintained. This effect is a benumbing of the fauces, a loss of tactile sense therein, and until you have produced this phenomenon, you need not look for the best curative effects that you have a right to expect from the bromides. When this effect has been produced, diminished doses will suffice to keep it up, but remember that it must be maintained. It is of the greatest importance when you have once instituted this course of treatment, to explain to the patient and her friends that it will be suicidal for them to discontinue it, as they will be so apt to do, if they imagine that it is not doing them good. Of course, if you yourself see that it is producing no good whatsoever, then you might as well discontinue it. Now, another question arises: Suppose that after the characteristic bromide effect is produced on the fauces, the patient has no more convulsions, how long thereafter should you continue the drugs? I would say, for at least two years after the occurrence of the last convulsion, and I would expect that by this long-continued use you would be able to cure some cases of pure, uncomplicated, essential epilepsy. Of course, I know it would be very hard to get a patient to persevere for so long a time, and but very few will follow your advice; this I perfectly realize, but, at the same time, I know you cannot benefit your patients unless they will so persevere, and it is your duty to faithfully impress this fact upon them; if they then disregard your directions, the fault is with them; you are not to blame, and your conscience is clear.

SIMPLE ANÆMIA.

Here, gentlemen, is a young lady, who comes to us suffering from pure, simple anæmia. She is at the age when this condition most commonly presents itself. It is pure anæmia, without a complication, and I could not call it pernicious anæmia. She has been under treatment, and has been given a great deal of iron, but it has done her no good; it has not enriched the blood. This is a fact, to demonstrate which was one of my reasons in bringing this girl before you, that in these cases of anæmia you may sometimes give iron, yet the globular richness of the blood is not increased; you increase the dose of iron, you order exercise, you see that your patient is receiving wholesome, nutritious food, yet the condition of anæmia persists. You marvel, you are nonplussed, for you have certainly been using the most approved treatment for anemia. Here let me give you a hint; there are certain cases of anæmia where the fault seems to lie in the nervous system, owing to some interference with its nervous supply, the blood-making function does not seem to work properly. This is such a case, and we might go on giving iron and the other usual remedies for anæmia until dooms-day, but we would do no good. What then must we do in such cases? We will do the most good by the administration arsenic and nux vomica. Please remember this curious fact about anæmia, because it will keep you out of many a scrape.

What used to be called the pilulæ ferri carbonas, but what, in the Pharmacopœia of 1880 is called the massa ferri carbonas, commonly known as "Vallet's mass," is, I think, one of the best forms of iron; when given in combination with arsenic, a decomposition takes place, but this does not deteriorate from its value. We will, therefore, order the following formula:

℞ Massæ ferri carb., ʒ iij,
Liq. potass. arsenit., f ʒ j,
Syr. simplicis, f ʒ iv,

M. Sig. Shake well and take one teaspoonful thrice daily, immediately after meals.

This will give in such dose, four grains of the iron and two drops of Fowler's solution. But you will notice that we have not provided for the nux vomica in this formula. We will, therefore, order her, in addition to the above, to take ten minims of the tincture of nux vomica thrice daily, before meals. But we must go a step farther into the treatment of these cases. We may be wise enough to detect this peculiar form of anæmia, and we may prescribe the iron and the remedies directed more especially to the nervous system, yet, without further instructions we will not cure the case. We must see that the patients have good food and plenty of exercise. They must have also an abundance of oxygen. How and when shall they take this oxygen? They should receive it from the atmosphere, by taking exercise about three hours after each meal. It is by attention to those little details that one physician possesses a superiority over another, and by them he cures his patients when others fail, and thus adds to his reputation. It is important that you should know when to order exercise. If a person goes out to walk immediately after eating, the blood that is required for digestion is diverted from the stomach to the muscles that are put in motion and that require blood to repair the waste that their exercise entails. Hence the interference with nutrition that is at the bottom of the anæmia is rather increased than lessened, if we allow our patients to indulge in exercise immediately after eating.

On the other hand, about three hours after eating, digestion is about completed and the food is ready to be absorbed. That the final steps in digestion and assimilation may be adequately and thoroughly completed an abundance of oxygen is now called for, and it is at this time that exercise in the open air will prove most beneficial to the patient suffering from anæmia. In such cases, also you will frequently elicit a history of more or less evident derangement of digestion, which must, of course, be attended to. So also, such patients will frequently suffer greatly from constipation, and in these cases the officinal pill of aloes will be of service. When, with the anæmia, we have associated a nervous or hysterical condition, we will obtain very good results from the officinal pill of aloes and assafœtida, especially if there be much flatulency.

SICK-HEADACHE.

We have here a young lady who does not look to be very ill. She has a good color and is not wasted in flesh; yet so deceptive oftentimes are appearances, that I tell you this girl is not at all well.

Her pupils, I notice, differ in size, and the oculist who has examined her tells us that he finds this condition of the pupils to be due to an affection of the third nerve, or of its branches. We must suppose that this affection is of the nature of a paresis, for from the dilatation of the pupil we must infer that less resistance is offered by the circular fibres of the iris (supplied by the third nerve) to the radiating fibres that are supplied by the sympathetic. Well, then, so much for the iris; let us now see how much this condition of the iris may have to do with the other symptoms that are present. It would be important, in connection with this condition of the iris, to ascertain whether there were any other evidences of intra-cranial pressure. She tells us that she suffers a great deal from headache, and occasionally from sick headache, which, I have no doubt, is due to the condition of the nerve.

When a patient comes to you complaining of headache, make it a rule always to carefully study the countenance: is she suffering? is she pale? what are the characters of her countenance during an attack? These are very important points for you to note, for they will have a great influence on your treatment. Suppose that during the attack, in addition to an expression of suffering, the face is pale, the vessels of the skin are contracted, or, on the other hand, suppose the face is flushed, the vessels of the skin dilated. Would you treat these cases the same? What indication would you derive from these conditions? Your course would be different in the two conditions. Suppose the face was pale, what remedy would you use? Well, supposing the anæmia was caused by the headache, or by the condition causing it, and not due to some collateral condition, that the vessels were contracted and the face pale, while in another case the vessels were dilated and the face flushed, would you treat them the same? Would you give the same remedies to the pallid as to the flushed patient, assuming the condition in each instance to be a part of the malady? Obviously not. In the case of the patient who was flushed the bromides would be called for, while if pallid you would use that class of remedies of which nitrite of amyl is the type. These are the principles that should guide your therapeutics. If, upon examination, you find that the attacks of sick stomach are reflex, from a disordered digestion, you cannot cure them without regulating the diet. The fifth nerve and the pneumogastric are very intimately connected. These attacks, in this case, terminate in nausea and vomiting; therefore, I conclude that the pneumogastric is affected secondarily to the fifth. But if the nausea and vomiting preceded the trouble in the head, I would infer that the stomach was the point of departure, and that the fifth nerve is implicated on account of its intimacy with the pneumogastric. This girl's appetite and digestion are good, and there is no stomachal trouble, save at the end of the attack, so that, as I said before, I conclude that the gastric derangement is consequent upon the trouble in the fifth nerve. The nucleus of origin of the pneumogastric and fifth nerves lies very close together, and if there be no anatomical connection between the two, there is certainly a very close physiological relation.

The treatment in this case will consist in the use of pills of caffeine, three grains thrice daily. You will please note that I say caffeine, and not citrate of caffeine. I always use caffeine, because there is no such thing as true citrate of caffeine.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, Feb. 15, 1886.

The President, C. T. PARKES, M. D., in the chair.

DR. WILLIAM T. BELFIELD gave a brief outline of

SEVEN CASES OF DIGITAL EXPLORATION OF THE BLADDER IN THE MALE,

as follows:

Case 1.—A patient 58 years old, who had been treated for several years, by various physicians, for cystitis and prostatic enlargement; complete retention had occurred several times. A diagnosis of villous tumor of the prostate was made, the nature of the growth being predicated upon the semi-gelatinous state which the urine presented after standing for a few minutes—an almost pathognomic symptom when present Exploration revealed a small villous growth just to the left of the urethral orifice in the bladder; and imbedded in its meshes were found two stones, as large as a pea and a bean, respectively, whose existence had not been suspected. Patient made a rapid recovery, and was entirely free from his old complaint three months afterwards.

Case 2.—A boy 17 years old had for two years suffered from frequent and painful urination, during which time considerable pus was constantly present in the urine. A probable diagnosis of tuberculosis of the urinary tract was made, and was confirmed some time afterward by the discovery of the characteristic bacilli in the urinary pus. At the urgent request of the parent the bladder was explored, with negative result. Some months afterwards nodular enlargement of the prostate and epididymis were developed. Patient's symptoms unimproved by the operation.

Case 3.—A man 63 years old, in the last stages of chronic cystitis, was admitted to the County Hospital. Had been treated for enlarged prostate. No enlargement of this gland could be recognized, but there was found, upon rectal examination, a collection of calculi occupying the exact site of the left seminal vesicle. Upon exploration of the bladder it was found that these calculi were contained not in the vesicle but in a diverticulum of the bladder, where they were completely encysted and covered with mucous membrane. This covering was torn and seventeen stones were removed. The patient's condition was much improved for two weeks after the operation, but at the end of six weeks he died.

Case 4.—A man 38 years old, suffering from all the symptoms of an extremely tight stricture of the deep urethra. No stricture could be found. Upon exploration of the bladder

there was discovered a pedicled cyst attached to the upper orifice of the urethral opening, and completely occluding the urethra like a valve; the tumor appeared to be as large as a small walnut. During an attempt at removal with forceps the cyst collapsed, about half an ounce of clear fluid escaping. The patient recovered rapidly, and has since remained quite free from urinary irregularities. This appears to be the first recorded instance of simple cyst in the male bladder.

Case 5.—A patient 38 years old, admitted to hospital in a typhoid condition, suffering from cystopyelitis for which no cause was discovered. Exploration of the bladder showed nothing abnormal. The cystitis and pyelitis subsided completely When patient was able to leave the hospital, it was discovered that he was suffering from an incipient myelitis.

Case 6.—A man 31 years old, admitted to hospital vith violent and fetid cystitis. It was found impossible to pass any instrument over a prostatic obstruction into the bladder; from the rectum the prostate was found irregularly enlarged. Upon exploration of the bladder, a malignant tumor, involving the prostate and a large part of the bladder wall, was discovered. Complete anuria ensued, and death from uræmia on the fourth day. At the autopsy, hydronephrosis of the left kidney, caused by a pipe-stem calculus of the ureter, was discovered.

Case 7.—A man 59 years old was admitted to the hospital for a chronic cystitis of fifteen years' standing, caused by prostatic enlargement. Perineal incision was made for temporary relief. Three weeks later a portion of the obstructing prostate was removed through the the perineal wound by the galvano-cautery. Complete recovery; the patient, who had for two years been practically unable to urinate except through a catheter, now passed water freely without assistance; the cystitis subsided. Nine months afterwards, acute uræmia and death. At the autopsy, small cirrhotic kidneys were found. This is believed to be the first case recorded in which a considerable portion of the hypertrophied prostate has been deliberately and intentionally removed.

On concluding his paper, Dr. Belfield spoke of a case which came into the hospital in a state of extreme exhaustion, evidencing violent cystitis. Urine containing pus was passed every fifteen minutes, with extreme pain. It was impossible to get an instrument into the bladder more than half an inch. The man was unconscious and could give no history, but by rectal examination it was discovered that the prostate was very much enlarged in the left lobe, the right lobe appearing normal in consistency and size. The doctor thought this almost a proof that in a man of this age, 31, the seeds of tuberculous disease were present. The bladder was opened and the finger inserted in the usual way, discovering a malignant growth covering an inch and a half of the left wall of the bladder. After the operation the patient passed half an ounce of urine, but died in three days from uræmia. The bladder and kidneys were secured and found to be the seat of extensive hyperinosis, caused by calculus. Another case was that of a French Canadian who had had trouble for eighteen years, and had depended entirely for urination upon the catheter for two years. The usual perineal incision was made, and a portion of the prostate removed. The operation was successful and the man was able to do without the catheter, although Dr. Belfield advised its use once a day. In June he had a slight attack of cystitis, owing to the fact that he had persisted in ignoring the advice in regard to the use of the catheter. About the 10th of September he was taken with uræmic convulsions, and died on the 18th. The last few days the urine became cloudy again. The bladder and kidneys were secured, and a channel found in the prostate large enough to admit the forefinger. Dr. Belfield thought it would have been better to have cut down from above in the hope of relieving the prostatic tumor.

Dr. E. Andrews suggested to the members that this subject was more important than has formerly been supposed. The former examinations made in these cases were very imperfect, and though the finger used occasionally to be put in the bladder it was not dreamed that the whole circumference of it could be reached. He thought it should be impressed upon the members of the profession that the bladder can and ought to be throughly explored.

The President thought this procedure for diseases of the bladder so new that it might be called novel, and it seemed singular that at so late a day the bladder should be explored in this way when surgeons have so long known that it could be opened in many ways without injury to the patient. He thought the profession greatly indebted to Dr. Belfield for his remarks.

Dr. W. M. Axford thought an incision in the perineum might facilitate a cure in cases of fistula, which at present are very difficult to cure, but did not know that it had ever been tried. We do know that renal fistulæ are very difficult to cure, probably because the urine is continually running over them. The procedure is practically harmless and may effect a cure.

Dr. W. T. Belfield said in conclusion that this procedure of inserting a drainage tube through the perineal wound for curing fistula of the urethra is mentioned in Harris's book, and seems to work with entire success. There is one point upon which he congratulated himself, viz: the discovery of the cyst of the bladder.

So far as he knew, nothing of the kind had been recorded in either the pathological or clinical literature of the bladder. The misery that it can cause is illustrated in the case under discussion, and from its nature it offers every hope of a cure.

Dr. W. L. Axford read a paper on

NOTES ON GENITO-URINARY SURGERY,

in which he said he believed that gleet is due to a stricture of the urethra, and can be cured by curing the stricture. He believed that dilatation cured a stricture by exciting inflammation at the seat of the stricture, and thus causing the absorption of the exudate. In the treatment of strictures he believed that perineal section is best in strictures which are deep-seated, narrow, or unyielding, or complicated by fistula or urinary infiltration; internal urethrotomy in all strictures of the meatus or fossa navicularis, for they will not stretch. For other strictures he would advise, as the case demanded, dilatation, divulsion, or internal urethrotomy. If the stricture is resilient, divulsion or internal urethrotomy, preferably the latter. He believed the dull pain in the back, and at times in the head, during the latter stages of gonorrhœa, to be due to urethral reflexes. Cure the gonorrhœa, or stricture, and these disappear.

He cited cases in which severe cephalalgia and skin diseases had been cured by curing strictures by internal urethrotomy. Also, cases in which dysuria and vesical discomfort had been allayed by slitting the meatus. In female urinary troubles, after excluding uterine disease, he had given relief by digital dilatation of the urethra.

Dr. E. Andrews referred to the point whether there is any danger or not in urethrotomy. European statistics show a considerable amount of danger in operations for stricture. He did not know the reason for mortality in Europe, for he thought it the general experience in Chicago that men don't die of these operations. Long ago he had left off keeping count of the cases he had operated on, and could not recall an instance in his own practice, or that of any one else in this city, in which the patient died in consequence of the operation for stricture. As to the question of divulsion, or cutting, he had performed the two operations indiscriminately, sometimes both on the same patient. He thought divulsion and cutting produce precisely the same result. Some strictures will stretch out under the divulsor and go back again, and cutting is better for these cases, but neither appears to be dangerous. He had found divulsors from New York instrument-makers repeatedly breaking down under strong strictures. Otis's instrument he thought exceedingly strong, but even that had failed in one instance. He expressed the belief that divulsion, thoroughly carried out, is as safe as cutting.

Dr. F. E. Waxham referred to a unique case coming under his care of stricture in a child of four years. He was convinced, however, that stricture is very rare among children. This was the only case that had come under his observation. Otis alludes to two causes—masturbation and gonorrhœa. In this case he found no history of gonorrhœa, and the mother denied the practice of masturbation. The child was put under the influence of ether; the stricture was so closed that he could only enter the bladder by means of a very fine bougie; this was followed by a larger one, this by a small catheter, and this by a steel sound, and the child was then able to pass the urine without difficulty. Before dilatation the child would undergo the greatest suffering every time he passed water, would scream and strain for several minutes, and oftentimes strain so severely as to cause evacuation of the bowels. After the first dilatation the child did nicely for a week and then was as bad as ever; the second dilatation was three weeks ago, and there has been no further trouble.

Dr. A. B. Strong asked if the cure was permanent after cutting unless constantly followed up with the catheter. He wished to know if there is anything better than simple dilatation. Cutting and divulsion are more rapid, but he thought gradual dilatation offered as good and permanent results.

Dr. W.T. Belfield suggested two points in Dr. Axford's paper that required notice, the value and safety of cutting. He thought it absolutely imperative that we limit our cutting operations strictly to the pendulous urethra. This was not merely a theoretical and anatomical consideration, but a practical one. He thought Dr. Axford in speaking of the three methods, stretching, divulsion and cutting, omitted one of the most importance, viz: the use of a constant electric current. Although this had not received a great deal of attention from the profession, he thought anybody who tried it would not give it up. It is said to produce the most permanent results, and is convenient and easy. He had tried it in his own practice, once in the hospital where he had the privilege of cutting, but tried the battery out of curiosity and found it worked nicely, and again in private practice where it was extremely important to the patient that no perineal section should be done. As to stretching the female urethra with the fingers, he thought it dangerous. When house surgeon in the County Hospital he had seen a woman die of peritonitis when that was done. He thought the best instrument for this purpose to be Stein's dilator, which has a continuous dilatation.

Dr. W. L. Axford said, in conclusion, that dilatation always has to be followed out by the

occasional passage of the sound for an indefinite period of time—all the patient's life. If the stricture is divided clear through DR. OTIS claims that a perfect cure will be made and no after-treatment will be necessary. DR. AXFORD thought that DR. OTIS, although an extremist on this subject, is about right. As to cutting in the membranous urethra, he did not think anyone would do that. He had never had experience with the galvanic current; had heard it recommended and also discountenanced. In dilatation of the female urethra he had always used his finger and succeeded first rate. Would always prefer to use his own hand, as no instruwent equals the human hand.

DR. H. T. BYFORD read a paper on the

PRODUCTION AND PREVENTION OF LACERATION OF THE PERINEUM,

with description of an unrecognized form. Illustrated. For the purpose of illustration the perineum was divided into two parts, the vulval or external, and the vaginal or internal. The former lies external to the muscles and the latter includes all the rest. When the perineum is slightly stretched by the head two rings may be felt by hooking the finger over the fourchette; an external ring marking the edge of the vulva and an internal ring marking the edge of the muscles and fascia about the vaginal orifice. Upon the positions and relations of these rings depends the safety of the perineum. When the occiput engages in them before the forehead passes the coccyx, the fourchette and muscular edge are pressed downwards and the perineum but little bulged and not at all endangered. When the occiput does not engage in the rings before the forehead leaves the coccyx, the fourchette is pushed upward before it, the perineum stretched from 3 to 4 inches antero-posteriorly, while part of the propelling force and nearly all of the directing force are lost before the head passes the rings and is born. The head in such cases has a greater distance to travel before delivery, involving loss of time and strength.

The author describes an obscure but not infrequent form of rupture, in which separate muscular fibres and portions of the fascia give way all through the perineum, or through a region of it, without involving skin or mucous membrane. Frequently there were not enough unruptured fibres left of the tissues to insure contraction and involution, and thus prevent displacement of the uterus. A persistent flabbiness is the chief diagnostic sign. To prevent rupture DR. BYFORD advises:

1. To gain time for dilatation without injury to the deeper tissues, by favoring a slow advance of the head over the floor of the pelvis.

2. In order to secure sufficient dilatation of the vulval and vaginal rings to make the occiput ride over them, instead of hooking under them by keeping the membranous pouch intact, or in its absence early resort to artificial dilatation rather than wait for the fourchette to be thus hooked up over a bulging perineum, and then resort to the ordinary methods.

DR. G. H. RANDALL thought that by directing the head many perineums might be prevented from rupturing. We sometimes fail to direct the head and manipulate the perineum as each case requires, because the woman is not in the proper position. Formerly he had delivered most of his cases in the dorsal position, but not being satisfied with the way he was able to manipulate the perineum and head, he had tried the lateral position, and it seemed a great improvement. He could now support the perineum by directing the head with a great deal more ease and effect than ever before, and it seemed to him that the lateral position is preferable to the dorsal.

Owing to the lateness of the hour DR. R. G. BOGUE deferred reading his paper on "A Case of Oöphorectomy and of Nephrectomy," but exhibited specimens, and said:

"The specimen that I have here is that of a remarkable cystic ovary in which both ovaries, with a large portion of the fallopian tubes, were removed. I have but one to present, though the whole surface of the ovary, or ovaries, was studded with small cystic tumors. The case was one of long-standing invalidism, and attended with a great deal of suffering. Finally the question of removal of the ovaries came up, and it was decided to remove them. They were removed and the patient recovered. The other specimen that I have is a wax model of a calculus that was found in the pelvis of a kidney during an operation for removal of fibro-nephroid kidney. On opening the loin, making the posterior operation and cutting to the kidney, it was found to be immensely distended and filled with pus, and in the pelvis of the kidney was quite a large calculus. The calculus was claimed by the family and given them, a wax cast of it being retained. The patient from whom this was removed did not recover."

Exhibition of pathological specimens from BATTEY'S operation, and specimens of ovarian tumor with twisted pedicle, by DR. C. T. PARKES, who said:

"The specimens which I have to present to you on this plate are two ovaries and forty-three gallstones. The two ovaries were removed from a lady who had suffered for over ten years from a great deal of trouble in the pelvis. They are noticeable in that the left one is very small and the right one very large. In this box are forty-three gall-stones which I removed from a gall-bladder yesterday. In reference to the oöphorectomy, I desire to call attention to the knot used in securing the pedicle, and which has

been rendered famous by MR. TAIT; he calls it the Staffordshire knot. Its use got me into trouble. It does not secure the pedicle by merely tying the knot. It must be drawn sufficiently tight to cut off circulation in the pedicle before the final knot is secured, otherwise the pedicle is very feebly constricted. I used it in this case in securing the left ovary, and passed on to the removal of the right ovary, during which operation I noticed a great deal of bleeding was going on. Having removed the right ovary, I then looked for the point of hæmorrhage and found a spurting artery in the unsecured left pedicle. I was astonished, because I thought I had tied the knot very tightly. It is necessary that the constriction should be made by the string, and the circulation must be entirely cut off before any attempt at tying is made. The other specimen is a large tumor, the weight of which was estimated at thirty-three pounds. Eight days before the operation, the patient having been in a previous condition of apparent good health, was suddenly taken sick, temperature 102°, pulse very fast and feeble, abdomen tender from peritonitis, urine suppressed. I diagnosed a twisted pedicle, and advised immediate operation. The operation was performed as soon as possible, and although she was in a very feeble condition at the time, the operation apparently made very little impression on her. As soon as the abdominal incision was made a black tumor was presented, and instead of the cyst portion being uppermost, as is almost invariably found, the solid portion was in front. When the trocar was pulled out there was scarcely any hæmorrhage from the opening made by it; usually there is considerable hæmorrhage, especially when introduced into a solid tumor. When it was removed from the abdomen there was found to be a turn and a half in the pedicle. The temperature fell after the operation and did not again come up to one hundred. On the seventh day all the stitches were removed and the patient is practically well to-day. These tumors sometimes have pedicles twisted completely off, so that they are in a sloughing conditio; in other cases the sloughing goes on so slowly that the pedicle is destroyed entirely. SPENCER WELLS says that he has found tumors with no pedicles. The three points that seem to me to indicate this diagnosis are the rapid current of distension, the commencement of peritonitis, and the suppression of urine."

The President said in answer to a question, that because a patient has symptoms of gall-stones and the evidences are pretty positive of their presence, no one must imagine that thereby he is going to have an easy time of the operation. The case from which these gall-stones were removed was a very difficult one for operation. The patient was a woman of considerable adipose tissue on the surface of the body, and it was difficult to expose the gall-bladder at all. The liver, instead of being distended and projected below the ribs, was contracted and high above them. It was difficult to find the gall-bladder at first, and it was found to be about the size of a finger, elongated and lying in its natural position and adherent to the liver. The fundus was contracted and hardened or thickened so that the finger had to be passed well down along its surface before any evidence of the stones could be found at all; it was separated from its attachments to the under surface of the liver, and then by carrying a thread through its fundus it was lifted to the top part of the incision and the finger introduced into the cavity of the gall-bladder and the stones removed. Of these stones the largest was found in the gall-duct. It was forced from the gall-duct into the gall-bladder.

DR. H. P. MERRIMAN asked the President if any cause was known for the twisting of the pedicle in ovarian tumor.

The President said that he made very close inquiry on that point; the night previous to the occurrence of the trouble the patient felt something move in the abdomen from the left to the right side. She was lying in bed at the time. In reply to DR. STRONG the President said he did not think that rupture of the cyst would not be followed by an increase in the size of the abdomen, nor by any change in the function of the kidney.

DR. W. FRANKLIN COLEMAN read a paper on

A REPORT OF THREE CASES OF OSSIFICATION OF THE CHOROID, AND THE REPORT OF ONE CASE OF OSSIFICATION OF THE LENS, WITH SPECIMENS.

In cases one, two, three and four the eye had been lost five, twelve, fourteen and thirty-four years, respectively, before medical advice was sought on account of sympathetic trouble in the fellow eye. In cases one, two and four the lost eye had occasionally been painful. In cases one, two, three and four sympathetic disease did not occur after the loss of the eye until five, twelve, eleven and eighteen years respectively. The sympathetic disease excited in case one was serous kerato-iritis; case two cyclitis; case three, irido-cyclitis and cataract; case four, optic neuritis and mild iritis. DR. COLEMAN advised the immediate enucleation of a bony eye on the same ground that the enucleation of an eye lost from injury in the ciliary region would be advised. Neither the ossification nor the injury is of itself the immediate cause of the sympathetic disease, but either may be the indirect cause by exciting an irido-cyclitis.

DR. R. TILLEY said the term ossification of the lens might lead to a misunderstanding, that there is actually ever an ossification of the

lens. BECKER, of Heidelberg, claims that ossification of the lens can not and does not take place, and that there is no case of it on record. He says that in the case of a ruptured capsule a membrane may be developed from the ciliary region, and from the developing blood-vessels an ossification may take place in the region of the lens, but that it should not be called an ossification of the lens. He gives an interesting case showing how readily a mistake may be made and ossification supposed: "A boy was struck in the eye with a hay-fork, and came under his care about ten hours after the accident. Forty-three hours after the accident the eye was enucleated, and he thought from a microscopic examination, what he supposed to be the lens was found to be an extravasation of blood, and the lens had escaped. He remarked that it is easy to see that an ossification might have occurred, under these circumstances, and the same been taken for the lens.

DR. COLEMAN said, in conclusion, that he was well aware that, literally and truly, the lens fibres do not become ossified, but wherever connective tissue exists ossification may occur, and connective tissue may occupy the site of the lens. DR. VOORHIES cites a case in his own practice of an ossific mass occupying the normal position of the lens which an expert microscopist, upon examination, pronounced ossification of the lens. DR. KNAPP does not say he denies the possibility of such ossification.

TRICUSPID REGURGITATION RESULTING FROM PRESSURE EXERCISED BY PERITONEAL EFFUSION.

BY JOHNSTON B. KENNEDY, M. D., DETROIT, MICH.

February 20th I was called to see JAMES M., aged 60. Weight 145 pounds. His general health had been excellent. Never had rheumatism or any disease of the heart, in fact, as he expressed himself, this would be the first time in his life that ever he had taken a drop of doctor's medicine. Upon my arrival I found him suffering from a severe attack of peritonitis. He informed me that a few days previous he had been seized with a violent pain which extended over the whole of the abdomen, and that he could not bear the slightest movement or pressure in that part. He lay on his back with his knees bent and legs drawn up. The bowels were constipated; tongue furred; constant nausea; breathing accelerated; skin dry and hot; the pulse rapid and weak. The case ran the usual course till the 10th day after my first visit, when I found a considerable amount of peritoneal effusion had taken place, and was surprised to discover some derangement of the heart. Upon examination tricuspid insufficiency was evident. Auscultation at the right auriculo-ventricular opening detected a prolonged first sound and a tricuspid regurgitant murmur. Pulsation of the jugular veins was observed to be synchronous with that in the carotid arteries. When, however, the patient assumed the erect position the heart symptoms almost entirely disappeared, clearly indicating that they were due in some way to the pressure of the peritoneal fluid.

DR. PASSERINI, in the "Gazz. degli Ospitali," says he believes the heart phenomena in such cases are produced mechanically by pressure in two ways: 1st. Owing to compression in the abdomen is produced venous ischæmia, while in the thorax there is venous hyperæmia, and as a result of those conditions engorgement of the right side of the heart. 2d. Owing to the gravitation of the peritoneal fluid when the patient is in the recumbent position, the diaphragm becomes fixed, free expansion of the lungs is prevented, and hence the flow of blood through them is obstructed. In support of his theory, DR. PASSERINI refers to the heart phenomena sometimes to be observed in advanced stages of pregnancy and ovarian tumors. That pressure is the indirect cause which produces those phenomena, there can be but little doubt. But we must also bear in mind that the forces which drive the blood through the lungs—when the obstruction takes place—are not entirely mechanical, but in part chemical. If from pressure the free expansion of the lungs is interfered with, preventing the admission of the proper amount of air, the blood is, of course, hindered in its passage through the alveoli. In cases of death by hanging or choking, the right side of the head is always found to be distended with blood. And why? Because the air had been prevented entering the lungs, indicating that the chemical process of aeration is necessary for the natural flow of blood through those organs. While such cases as the one above related are of rare occurrence, it is, nevertheless, a matter of some importance to clearly understand that the derangements of the heart observed are purely functional, dependent indirectly upon mechanical influences and not the result of any organic lesion. Much alarm might easily be caused by basing the diagnosis and prognosis upon the murmurs alone, without any reference to the patient's past history or present physical condition. It is, therefore, well for the medical man to examine carefully into all the details of the general condition of a patient presenting heart symptoms, lest by basing his diagnosis upon the murmurs alone, he should give an unfavorable opinion, much discouraging the patient and his friends, and afterwards surprising himself to find that coincident with the improvement of the patient's general health, there is a complete disappearance of the dreaded heart murmurs.

Correspondence.

MOTHER'S MARK.

We all hear of, read about, and even sometimes see children marked by their mothers. While some of these cases are not well marked, here is a well-marked case, or badly-marked—just as the reader takes it:

Mrs. B. D., living near K., Minn., while between four and five months pregnant, saw a dog attack a pig in the yard, the dog tearing off completely the pig's left ear. Four months later Mrs. B. gave birth to a daughter, now fourteen years old and presenting the following anomalies of the left side of the face: Complete absence of lobe of the ear, there being only a small mole posterior to meatus; meatus normal and hearing good. Complete paralysis of facialis sinister, with, of course, the usual symptoms. Complete paralysis of abducens oculi, hence permanent inward strabismus. The part of cornea not covered by eyelid during sleep, the seat of keratitis. Speech normal.

We must confess *causa latet, vis est notissima.*

A. C. AMUNDSON, M.D.

Cambridge, Wis.

The Medical Record is authority for the statement that there are numbers of practitioners in New York City, excellent physicians and honorable gentlemen, who see patients at their offices for fifty cents, and who seldom get more than a dollar for a visit at the patient's house, while they willingly take ten dollars for a confinement, and sometimes gladly compromise on five dollars. With such a condition of affairs at the metropolis, where is the sense of practitioners in the rural districts grumbling at low fees? In the matter of pay for his services the physician occupies the same relation to economic laws as the butcher and the baker and the candlestick-maker. The law of supply and demand raises and lowers fees as it does the price of manual labor.

PASTEUR holds that a dog suffering from rabies dies in the course of a few days (exact number not specified). So that if the dog which bites lives more than a "few" days after doing the biting, the person bitten need have no apprehensions regarding hydrophobia. It now transpires that the dogs which were bitten by the dog which bit the Newark, N. J., children who were sent to Paris, have been kept in seclusion ever since, but not one of the seven has developed any symptom of rabies The excitement aroused by the biting of the children seems, therefore, to have been quite unjustifiable, and the "Pasteurization" of the children quite useless as a test of the efficacy of the "discovery."

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Notes.

The unusual amount of original matter contributed to this number of the AGE, and the very interesting nature of the same, have caused us to hold over the usual quota of editorial matter and a number of book notices which we had prepared.

Apropos of the anecdote of the Detroit doctor in last AGE, a correspondent in Northern Michigan gives his observation of a woman with pets. MRS. D—— had been married about three years when he met her at a neighbor's house while attending a case of confinement, where the usual topic of such occasions was discussed. Her mother-in-law, who was anxious to become a grandmother, and had a daughter recently married, remarked that she was piecing a cradle quilt, and the one that would need it first should have it. After a little MRS. D—— said she must go home and feed her cat. He asked her if she had a pet cat, when she replied she had, and began to tell the many good qualities of said cat. Turning to her mother-in-law he advised her to have the cat killed, or she would never need the quilt. In due time the daughter was confined, and claimed the quilt. The other still had the pet cat, but while on an extended visit to the southern part of the state the cat disappeared, and within a year after her return she became the possessor of a more valuable pet.

The Weekly Medical Review probably heads the list in the matter of changes which take place in the place of its publication and in its editorial management. It is now issued in St. Louis, and the last change in its staff took place a few weeks ago. The journal is now conducted by the Medical Press and Library Association, the last two numbers having been edited by that body, and the improvement which it has undergone, in consequence, is marked and pleasing. Its department editors are not mere figure heads, as is too often apt to be the case. If subsequent changes could be followed by similar improvement, the Review cannot have too many of them.

Dr. Holt, President of the Louisana State Board of Health, is an implacable enemy of the National Board of Health. In a recent communication he declares: "If I can succeed in helping to split it into kindling-wood, and then making out of it a little bonfire, I shall always claim the gratitude of my country for a patriotic service."

The latest thing in babies is reported from Utah, in the Weekly Medical Review. It is a plump and healthy full-term child, which weighs two pounds and six ounces, including the handkerchief and shawl in which it was swaddled. The woman was, probably, attended by a homœopath. Either that or the Mormons are degenerating.

Medical Progress.

Sulphate of Sparteine as a Cardiac Tonic and Substitute for Digitalis and Convallaria.—Christison in his "Dispensatory," published in 1812, thus speaks of Broom: "As an indigenous plant, of undoubted diuretic virtues, broom well deserves a more careful examination, both chemically and therapeutically, than it has hitherto received."

Few plants have experienced so many vicissitudes of favor: one time utterly neglected or carefully shunned as dangerous, and at another enjoying the most distinguished favor. It was included in Ray's list, and formed one of the drugs on which Sydenham relied. But until Peruson ("Observations on Broom," 1835), one of our few original investigators in therapeutics, undertook the task, the plant was simply admitted on popular repute. Thus Cullen writes of broom: "I found it in use among the common people, and have since prescribed it to some of my patients." Yet it must have commended itself to the profession, for from 1618, when it first appeared in the London Pharmacopœia, it has found a place in each succeeding edition

Passan gave it a place in his "Herbarius Patavie," 1485, and it also found a place in the "Hortus Sanitatis," 1491, and the "Great Herbal" of Southwark, printed in 1526.

Stenhouse, in 1840, discovered in broom tops two interesting principles, *Scoparin*, $C_{21}H_{22}O_{10}$, an indifferent and somewhat acid body, and the alkaloid *Sparteine*, which has the formula $C_{15}H_{11}N_1$. Scoparin is soluble in water or spirit, and crystallizes in yellowish tufts; sparteine is a colorless oily liquid heavier than water, and sparingly soluble in it, boiling at 288 degrees C. It has a decidedly alkaline reaction, and forms salts with acids which have a decidedly bitter taste; it is colorless, but on exposure to light becomes brown; the change of color does not appear to affect the therapeutic action of the alkaloid. It is obtained from the acid mother liquid from which scoparium has been obtained by neutralizing the liquid with soda, and distilling, when ammonia and sparteine are obtained. The amount of the alkaloid in the plant is very small. Mills succeeded in obtaining only ʒ vj. from 150 pounds of the plant tops.

Stenhouse ("Phil. Trans," 1851), asserts that broom plants grown in sunny aspect are more rich in sparteine than those grown in the shade.

Pearson, who was one of the first to claim tonic properties for the plant, recommended a tincture prepared from the seeds, and Van Mons, who advocated broom for gout and rheumatism, gave the following curious prescription: ℞. Flor. Scoparii ʒ j., Sacchari Albi ʒ ij., Ferr simul, ut fiat confectio. Sumat ʒ j. vel ʒ ij. pro dosi.

Christison's appeal to the physiologists and pharmacologists got no response. Our best books dismissed sparteine with a few lines. "It is similar in its action on the system to nicotine, but less energetic," is the statement of one of the best of our advanced and most recent handbooks. The fact that sparteine was one of the three alkoloids that contained no oxygen, excited no interest among pharmacologists engaged in original reseerch. But luckily on the continent the alkaloid was being examined and its therapeutics formed the subject of a communication to the French Academy of Sciences, by M. Germain See, which has been published by the author in La France Medicale, Dec., 1885. After a very brief summary of its history and some of MM. Fick and De Raymond's experiments, he goes on to say that after very many experiments on the lower animals he determined the therapeutic dose for cardiac affections to be 1½ gr. dose of acid sulphate in watery solution. He declares its effect on the heart to be produced without any inconvenience in either the nervous or digestive system. His observations were on fourteen cases, on six of which sphygmographic tracings of the pulse were taken, which tracings the author exhibited to the Academy. Of these cases two were old women, greatly troubled with difficulty of breathing, which the author of the paper ascribes to cardiac degeneration and atrophy. There was general debility, with a feeble impulse, and the cardiac sounds almost imperceptible by auscultation. The pulse was weak and hardly perceptible at the wrist. In the first of these two cases there was slight incompetency of the aortic valves, and in the second case there was narrowing of the mitral orifice with arterial degeneration and marked irregularity of action. But the sixth case is even more typical of the good effects of the alkaloid; the patient suffered from cardiac asthma with albuminuria, and a very weak pulse; forty minutes after a dose of the alkaloid all was changed, the regularity and force of the heart was restored.

He sums up the result of his observations by declaring that sparteine—1st. Has as its most important effect the relief of the heart and pulse. That its action is similar to digitalis or convallarine, but that its tonic action is distinctly better marked, and that it acts more promptly and its effects are more durable; 2d, Quickly produces regular cardiac rhythm; 3d, Accelerates the heart-beats.

Its effects usually appear from one to two hours after taking the medicine, and the effect continues for from three to four days after the medicine has been discontinued. During this time the heart's force continues good, the breathing easy and the diuretic effects of the

alkaloid are, the author considers, second only to those of iodide of potassium.

Sparteine is recommended by the author where the heart is deficient in driving force, either from degeneration of its own tissue or some obstacle in the general circulation. Such a general rule cannot commend itself to practitioners, for there are thousands of cases in which a distinct increase of the heart force would produce death, and with a drug whose effects continue for days after its use has been discontinued, extreme caution should be exercised before an old patient with atheromatous arteries has the heart driving-force increased. If, out of proportion to the resisting power of the arterial wall, the blood is forcibly pumped out of the heart into atheromatous vessels, nothing but a rupture of the weakest or most pressed-up vessel can result.—GEO. M. FOY, F.R.C.S., in *Med. Press.*

OBSERVATIONS ON THE PRACTICAL USES OF LANOLIN.—BY OSCAR LIEBREICH, M. D., Professor of Materia Medica in the University of Berlin.—From my investigation of the composition of the cholesterine fats found in keratinous tissues, I conjectured that the absorption into the skin would be best in the case of those fats which have their origin in keratin-bearing substances, as hair, epidermis, etc. The old theory, that the skin was only oiled from glandular secretion, did not harmonize with my research; and lanolin, upon my suggestion, is now being tested as to its efficacy in therapeutics as a new basis for salves and ointments. It possesses such peculiar properties, also noticed by BERTHELOT, that it becomes a matter of necessity to give a number of formulæ, in order that the druggist may more easily compound and dispense the remedy. It is also of importance to add other ingredients to make it more pliant, as it is too sticky a mass in itself to be employed alone; and, from the many trials which I made with different substances, as vasaline, paraffine, ointment, glycerine, oils, and fat for this purpose, I found the latter by far the best, as the others generally interfered with the absorbing qualities of lanolin.

I must also state that many substances, under the name of pure wool-fat and wool-oil, which have found their way into the trade before and since the introduction of lanolin, are injurious, as they contain free acids and various animal substances.

I shall not fail to publish, in the near future, its more exact chemical composition; but for the present I may suggest the following tests for its purity in therapeutics:

1. A small quntity, on being heated in water over a water-bath, must show the absence of glycerine.

2. If a solution of caustic soda be added, ammonia must not be developed.

3. The fat, if a small portion be heated with water on a water-bath, must separate in oily drops without producing an emulsion. If the quantity employed be large, it must separate as a clear oil.

4. With blue litmus-paper, the reaction must not be acid.

5. For examination, if it be mixed or well rubbed with water upon a ground-glass plate, with an iron spatula, the result must be a product containing over 100 per cent. of water; and, if the lanolin employed be pure, the kneaded mass will be sticky and paste-like, to which the spatula readily adheres, but, if impure, the mass will have a soap-like smoothness, from which the spatula readily glides.

6. On exposure, the upper surface of lanolin and all lanolin salves and ointments becomes darkened, due to the evaporation of water, and not to its decomposition.

7. It never becomes rancid, and its smell should remind one of wool.

My experience with the remedy, with that of other physicians, has been but limited, yet I do not hesitate to pronounce the results so far obtained most promising.

The first question which presented itself was, whether the skin would bear it well. From its use in over 400 cases, in the hospital and private practice of DR. LASSAR, the dermatologist, no irritation of the skin was ever produced—a result which my own experience, during the years in which I have been experimenting with it, confirms. For this reason alone, it is to be highly recommended for massage, for which purpose I should suggest the formula No. 11.

It is true it is not as smooth as vaseline, but it has the advantage that the skin, after being rubbed dry with a cloth, still remains soft and pliable.

In cases where the epidermis is fissured, as, for instance, in chapped hands, the following recipe may be advantageously employed: that is, No. 11.

The parts affected, particularly the hands, are to be well washed with some good soap, and then to be thoroughly rinsed with water. Upon the moist surface a small quantity of the ointment is to be well rubbed in, and the parts afterwards to be wiped with a dry towel. The skin is left soft and supple, on account of the rapid absorption and retention of the lanolin; and, what is more remarkable, the hands are not greasy, yet the water flows from them as if oiled. Accordingly, it may be especially useful for the hands of surgeons and obstetricians. Hands thus treated show a greater resistance towards cold and water.

The influence produced upon the skin in seborrhœa sicca is remarkable. On combing the hair with a fine comb, the scales disappear rapidly. For this purpose I should employ prescription No. 21, which may be somewhat varied according to the taste of the individual.

In pruritis ani, I have used lanolin with sulphur, with admirable results.

DR. LASSAR, in his polyclinic for skin diseases, has found that psoriasis heals very easily and quickly, and without irritation, through the use of a 25-per-cent. lanolin-chrysarobin ointment. It remains for the future to determine whether in all cases equally favorable results will be reported.

In connection with the lanolin-chrysarobin treatment, I had the opportunity of seeing an interesting and remarkable result obtained by DR. WENDE, of Buffalo, N. Y. The patient, a boy aged 13 years, from the polyclinic of DR. G. BEHREND, had tinea favosa over the greater part of his head. The case was of eight years' standing, and had resisted the most careful and thorough treatment. It was shown that the case was undoubtedly favus, by DR. GRAWITZ, assistant of PROF. VIRCHOW, who made

a pure culture of the fungus, of material obtained from the head of a boy, and inoculated it on the left arm of DR. WENDE, where the most characteristic scutules appeared.* At first, only one-half of the head was treated in this manner. After a few applications, it showed marked improvement; and the advance was so rapid, that it was decided to treat the remaining half in a similar way. In twelve days the case was apparently cured, and the treatment was for the present discontinued. The favus on the arm of DR. WENDE disappeared upon one application of 10-per-cent. and one 20-per-cent. lanolin-chrysarobin ointment. DR. WENDE further informs me that a radical cure in herpes tonsurans, and in pityriasis versicolor, was produced with a 10-per-cent. ointment.

Such brilliant results further illustrate how great a benefit was conferred by SQUIRE upon the medical profession through the introduction of chrysarobin. DR. LASSAR employs salicylic lanolin in the treatment of eczema. This may answer well in many cases; but, inasmuch as water is not always tolerated in eczema, DR. WENDE recommended formula No. 3, the water to be expelled before applying. Lanolin is excellently adapted to form the basis for blue ointment; the mercury is found more minutely divided than I have ever before witnessed. Upon my request, my friend GEHEIMRATH MAYER, in Aix la-Chapelle, in connection with GEHEIMRATH BRANDIS, made a thorough test of it. They consider it superior to other vehicles for this purpose. In no case did it show an inclination to produce eczema.

As can be seen from the formulæ, no fat is required in compounding salves where fluid extracts are used; but I must especially warn against employing the full dose of toxic agents, as only one-half the dose is necessary. Thus a veratrine salve, consisting of fat 10 grains, veratrine 0.25 grain, produced no irritation on the skin; while a salve of lanolin 10 grains, veratrine 0.25 grain, was so strong that for five hours an intense burning sensation was perceptible on and about the point of application.

I annex the following formulæ, which may be changed by the physician, as necessary:

1. ℞ Argenti nitratis, partem 1.
Lanolini, partes 9.

This ointment is somewhat solid; good to spread on charpie.

2. ℞ Cerussæ, partes 30.
Adipis, partes 10.
Lanolin, partes 60.

3. ℞ Emplastri plumbi simplicis, partes 50.
Olei olivarum, partes 20.
Lanolin, partes 20.

This salve appears solid, but becomes pliant as soon as brought into contact with the skin. In eczema it should be heated until the water has evaporated.

4. ℞ Emplastri plumbi simplicis,
Lanolin, partes æq.

As an ointment, this form is too solid, but useful as a plaster.

5. ℞ Hydrarg. præcipitati albi, partes 10.
Adipis, partes 10.
Lalnolini, partes 80.

6. ℞ Hydrarg. oxydati, partes 10.
Lanolini, partes 90.

When used as an eye-salve add 30 per cent. of fat.

7. ℞ Liquoris plumbi subacetatis, partes 8.
Adipis, partes 10.
Lanolini, partes 80.

8. ℞ Zinci oxydi, partes 10.
Adipis, partes 10.
Lanolini, partes 80.

9. ℞ Cinnabar, partes 10.
Adipis, partes 10.
Lanolini, partes 80.

10. ℞ Hydrargyri, partes 50.
Lanolini, partes 12.
Unguenti hydrarg. cinerei, partes 2.5.
Sebi ovilli, partes 25.
Lanolini, partes 87.5, according to the formula of DR. DIETERICH.

11. ℞ Potassii iodidi, partes 20.
Aquæ, partes 10.
Adipis, partes 20.
Lanolini, partes 150.

12. ℞ Cetacei, partes 10.
Olei olivarum, partes 30.
Lanolini, partes 40.
Aquæ rosarum, partes 50.

13. ℞ Iodoformi, partes 10.
Adipis, partes 10.
Lanolini, partes 80.

14. ℞ Chrysarobini, partes 10 ad 20.
Adipis, partes 10.
Lanolini, partes 80.

15. ℞ Picis liquidi, partes 20.
Lanolini, partes 80.

16. ℞ Balsami Peruviani, partes 10
Olei terebinthinæ, partes 20
Lanolini, partes 70.

17. ℞ Acidi boracici, partes 10.
Adipis, partes 20.
Lanolini, partes 70.

18. ℞ Acidi carbolici, partes 5.
Adipis, partes 5.
Lanolini, partes 90.

19. ℞ Acidi salicylici, partes 10.
Adipis, partes 20
Lanolini, partes 70.

20. ℞ Naphthol, partes 5.
Adipis, partes 10.
Lanolini, partes 85.

21. ℞ Lanolini, butyri cacao, ää partes 50.
Adipis suilli, partes 5.
Olei rosarum, gr. iij: a hair pomade.

—*British Medical Journal.*

* A full account of the case will be published by DR. WENDE.

THE LOCAL THERAPEUTICAL VALUE OF LACTIC ACID.—We noted in our Retrospect for 1885 that lactic acid had been freely used in Germany during the latter part of the year as an escharotic in a number of local disorders. The subject appears to be of sufficient importance to warrant a more detailed notice. The drug was brought before the Royal Society of Physicians, of Vienna, in November last, by PROFESSOR MOSETIG, and it is from his paper on the occasion that the following is condensed. According to him, lactic acid is destructive of pathological tissues, whilst its effects upon healthy structures are far less marked, and generally not noticeable at all. When applied to fungous spots or patches of lupus the diseased tissues were destroyed, whilst the healthy were untouched. Lactic acid takes the place of Volkmann's spoon in many cases. In inoperable fungous diseases of bone, and infiltration of bone by carcinoma, lactic acid gives good results. PROF. MOSETIG has applied it superficially, and also injected it into the parenchyma. In the first case he applies the ac. lactic. pur. directly to the fungous, lupous, and carcinomatous ulcers. It is best applied by soaking a piece of lint the size of the ulcer in the preparation and laying it on. No superfluous moisture must ooze from the lint. This is to be covered with a waterproof covering to prevent absorption from the lint. This may be occasionally exchanged for a freshly prepared paste of lactic and silicic acids, which is to be spread on impervious paper to the thickness of the back of a knife. For protecting the neighboring parts fat or collodion may be used. If PROF. MOSETIG is not perfectly certain of the soundness of the neighboring surface, he uses no protective but allows the acid to play freely on the adjoining skin or cicatricial tissue This never does any harm; at the most it simply irritates the parts. For parenchymatous injection he employs an aqueous solution of from 50 to 70 per cent., of which he injects from ½ grm. to 1 grm. In large patches of disease two or three syringefuls may be injected. For the sake of convenience, he allows the dressings to remain on 24 hours, as although the application generally causes rather sharp pain, and the duration of the pain probably indicates the duration of the activity of the drug, it might appear more rational to remove the dressing when the pain ceases. After removal of the dressings the part is bathed with warm water and the spot covered with rubber-paper. Fats are to be avoided, as they diminish the activity of the acid, if they do not destroy it altogether. Before a fresh application, 24 hours at least should elapse; it is best of all to wait until the slough is cast off, and during the interval dressing only with water and rubber paper. DR MOSETIG presented two cases treated by him with lactic acid. The first, a workman, aged 55, had in June an epithelioma of the right temple, a square centimetre in size, passing over the external angle of the eye. The margins of the ulcer were hard. The lactic acid was applied 26 times superficially and four times interstitially (50 p. c. solution). For 14 days no more lactic acid had been applied, but the granulations had been twice touched with lapis. The infiltrated parts of the eyelid were removed with the knife. *Result.*—The whole of the surface formerly ulcerated, with the exception of a small healthy granulation, was cicatrized, the cutaneous edges soft and smooth. The second case was that of a woman, aged 60, whose disease began four years ago with a rodent ulcer commencing on the cheek. It destroyed the whole cheek, as far as the upper lip downwards to the border of the masseter externally, to the bridge of the nose internally, and attacked the orbit upwards. The bulb had to be extirpated, and with it a portion of the upper eyelid. Twenty superficial applications were made, and the border on the bridge of the nose was removed with the thermo-cautery. The whole of the granulations on the upper maxilla, lips, and orbit were soft and healthy, and cicatrisation was commencing at the edges. A discussion took place after the reading of the paper, in which PROFESSORS WEINLECHNES and DITTEL and DRS. ROTH and E. SCHIFF took part. All had tried lactic acid in various affections. They were not, however, by any means so enthusiastic about it as PROFESSOR MOSETIG. DR. ROTH had used it in various tuberculous affections of the larynx, but he could not verify any amelioration of either the subjective or objective symptoms. PROFESSOR DITTEL had not met with success in its employment.—*Medical Press.*

CASCARA SAGRADA AND OTHER ADDITIONS TO THE BRITISH PHARMACOPŒIA, 1885.—As this edition of the Pharmacopœia has been so freely criticised in the weekly medical journals, and as it is, no doubt, ere this in the hands of most of our readers, we need not devote much space to our review. The old chemical notation has been wisely omitted, and we must also approve of the alteration in the nomenclature of many of the drugs, although it may cause a little embarrassment at first. In order to promote uniformity of strength in certain of the more active medicines, they have directed that the solid ingredients be reduced to a nearly uniform state of disintegration, and then passed through sieves of a particular-sized mesh. This was very much needed, as frequently medical men do not get the expected effects from the medicines they prescribe; but we are afraid even this will not cure the evil, so long as there are so many careless, incompetent, and dishonest manufacturers and dispensing chemists as at present exist. Even with many pharmacopœial articles, it is often necessary to order those of a particular manufacturer, and also to send your prescription to a chemist on whom you can rely, before you can feel satisfied that your patient is taking what you intended him to have. There have been 113 new preparations added; the majority of these are very well known, but it is well that they should now receive an official position, and have their doses authoritatively stated. We are very pleased to see the addition of cascara sagrada, which was first introduced by those enterprising chemists, MESSRS. PARKE, DAVIS & CO., of Detroit, and first brought under the notice of the profession in this country in an article by DR. WILLIAM CARTER in this journal, "On Some Recent Additions to Therapeutics," July, 1882. This is an exceedingly valuable drug in chronic constipation, but one with which we have been frequently disappointed. However, on each occasion on which it has not had the desired effect, or has given rise to unpleasant symp-

toms, such as griping, we have invariably found that the chemist had dispensed some cheap and inferior preparation of a careless manufacturer, and on some occasions had substituted rhamnus frangula. We now invariably order PARKE, DAVIS & CO.'S preparations, and see that our patients get them. It now remains to be seen whether other manufacturers will supply a reliable article in conformity with the pharmacopœia. This valuable drug should only be used as a tonic laxative and never as a cathartic, as there are many more effectual agents for the latter purpose. The largest dose we have ever prescribed has been ½ a drachm of PARKE, DAVIS & CO.'s fluid extract, so we were rather surprised to see the dose stated in the pharmacopœia as ½ to 2 fluid drachms. There is here a very wide margin allowed, of which we are afraid free use will be made in substituting inferior or spurious varieties of the crude drug in the preparation of the extracts. Hence the want of potency of the preparation may be often overlooked, and the necessity of a larger dose wrongly ascribed to the obstinacy of the patient's bowels. If a dose of more than ½ a fluid drachm be required, in the majority of cases the drug will be found at fault.

Glycerinum aluminis, and glycerinum plumbi subacetatis, first introduced by BALMANNO SQUIRE, are among the additions. Tabellæ nitroglycerini is the only form in which that drug appears. This is a most expensive and inconvenient form, and one in which we are convinced it will be very seldom ordered; moreover, it is a drug which is very frequently prescribed in mixtures, and hence requires to be prescribed in solution.

Among the articles omitted we specially regret to see the green iodide of mercury; for the other articles we have no special predilection, and could suggest many other articles we would have no objection to see on the list of those expunged.

The names of a large number of articles have been changed, so as to bring them more in accord with those used in other scientific works. The composition of a few of the preparations has been altered. On the whole we have been very highly pleased with the work, and have no wish to play the part of carping critics; we can therefore commend the work as a great improvement on its predecesssor.—*Liverpool Medico-Chirurgical Journal.*

THE USE OF NAPHTHALIN IN CHRONIC DIARRHŒA AND IN TYPHOID FEVER.—Considerable has been written regarding the application of naphthalin in therapeutics. This is a substance derived from coal-tar, having a white, crystalline appearance, and a pungent odor, strongly suggestive of a gas factory. It was first used medicinally, according to CAGNOLI, in 1842, as expectorant, but did not gain the attention of physicians. In 1884, Dr. B. TESTA studied its physiological properties. His conclusions were somewhat negative. He found that it was absorbed with difficulty, and that it had no effect upon normal temperatures, but that it reduced febrile temperature, diminished the excretion of urea, and did not cause albuminuria.

DR. G. FRONMULLER (Memorabilien, 1883, p. 257) used naphthalin in chronic bronchial catarrh and phthisis, with no very positive results.

Attention was first strongly called to the drug by PROF. ROSSBACH, of Sena, who at the Congress for Internal Medicine of 1884, strongly recommended it in disorders of the intestine. In chronic diarrhœa and dysentery, with or without ulcerations, ROSSBACH found naphthaline very efficient. He gave it in single doses of gr. ii. to gr. x. t. i. d., increasing this sometimes to daily doses of five grammes. His prescription for an adult is:

℞ Naphthæ puriss.,
Sacchar. alb, ää 5.00 grammes.
Olei hergamot, 0.03 gramme.

M. Sig.—Pulv., div. in chart No. xx. Sig.—5 to 20 daily.

The administration of naphthalin causes the fæces to be perfectly disinfected and odorless. Its action in cases of chronic diarrhœa is rapid, and most cases, if uncomplicated, are cured in from five to fifteen days. DR. G. V. LIEBIG, of Reichenhall, subsequently reported a good result from enemata of naphthalin in a case of dysentery (Bayr. ärztl., Intell. Bl. xxxi. 29, 1884.)

DR. PH. PAULI, of Lübeck (Berlin, Klin. Woch., No. 10, 1884), used naphthalin with good success in the intestinal catarrhs of children. He observed, however, in two cases, some unpleasant after-symptoms, and he expresses the opinion that the drug should be given to small children with care, and that they should be watched. Not more than three grains every three hours should be given to children two years old.

DR. E. LEHMANN observed good results from naphthalin in two cases of chronic intestinal catarrh. In another case he noted some unpleasant effects, resembling strangury, from the drug. In acute diarrhœa, and in the vomiting of children, naphthalin has been given with contradictory results. In dilated stomach and in the diarrhœa of phthisis, naphthalin has sometimes succeeded and oftener failed (SCHULTZ, CAGNOLI, EWALD, PAULI).

Several observers have found that naphthalin given in large doses will, at times, cause a slight bladder catarrh, burning urine, and even strangury, but ROSSBACH contends that these accidents can be avoided by beginning with small doses and gradually increasing them.

It is in connection with typhoid fever that the claims for naphthalin are greatest. ROSSBACH and his assistant, DR. GÖTZE, believe that it has the power of shortening the course of this disease, lowering the temperature, and, if given early, of even aborting an attack. The Therapeutic Gazette gives the following account of GÖTZE'S observations, made upon twenty-five cases:

"All cases, with the exception of three, were uninterruptedly treated with naphthaline during the entire typhoid process, all other medication being excluded. The administered dose was one gramme (fifteen grains) and five to seven grammes *pro die*. (The drug used was, according to ROSSBACH'S recommendation, always the purissimum resublimatum with the oil of bergamot.) In the course of the disease all patients had used over seventy grammes two and one-third ounces), some even as much as one hundred and fifty grammes (four and one-half ounces).

"Untoward secondary effect was noted only in a single case, in which toxic symptoms, marked by cerebral functional depression, set in. The general course of all cases was exceptionally favorable, and the benign character of the intestinal symptoms very pronounced. In three cases an actual abortion of the affection appeared unquestionable; other cases coming under treatment early terminated in six to ten days, in others the fever did not last beyond sixteen days; while in another series the duration of the disease was not shortened at all, though the period of thermal elevation was sensibly shortened. Three cases perished from grave complication, though not from the typhoid process itself. Of considerable interest are the comparative trials with antipyrine and naphthalin. Repeated observations convinced GÖTZE that naphthalin promptly reduced the febrile temperature in cases in which antipyrine (given in antifebrile doses) proved useless."—*N. Y. Medical Record.*

DAMAGING RESULTS FROM THE USE OF COCAINE.—Since the introduction of cocaine as a local anæsthetic in ophthalmic surgery, I have repeatedly made use of the drug, almost to the exclusion of general anæsthetics, in all operations on the eye, with the exception of the enulceration of the globe. I have used it repeatedly in the extraction and in the needling of cataract, in iridectomy, tenotomy, syndectomy, and in grafting the conjunctiva of rabbit's eye, always with the most gratifying results. I have used MERCK'S hydrochlorate of cocaine—usually a four-per-cent. solution. I have also used PARKE, DAVIS & CO.'S preparation with equally good results.

In the majority of cases there was markedly less irritation and inflammation following the operation made under the local anæsthetic than without it. In many cases there seemed to be scarcely a sign even of congestion after the operation, it seeming to act as an antiphlogistic.

September 19, 1885, at All Saints' Hospital, I experienced my first bad results from its use. This was in a cataract operation on a Swede, F. B. W., 42 years of age. The cataract had been forming for 12 or 15 years, and was quite hard and came out *en masse*. I made VON GRAEFE'S modified linear extraction. The incision was cleanly made without the least dragging, with a beautiful conjunctival flap. The iridectomy was also made without any dragging of the iris or ciliary body; in fact, it was one of the most satisfactory operations I ever made, and the most happy results were looked for. But in about 36 hours after the operation, untoward symptoms appeared. The patient complained of pain in the eye; the lids were slightly swollen and red. Antiphlogistics and narcotics were resorted to. The next day the pain had subsided, but the œdema of the lids remained about the same, and there was a slight mucoid discharge through the fissura palpebrarum. The mercurials and opiates were continued and in a few days all symptoms of inflammation disappeared. The lids were bathed and their margins kept free from the slight discharge, but they were not opened until the seventh day after the operation. On opening them, I was greatly pained to find that the patient had no sight, for the pupil was completely occluded by a plastic exudation. The anterior chamber was deepened and the aqueous humor charged with lymph. Subsequently the aqueous cleared, the chamber become shallow, the iris advanced, coming almost into apposition with the cornea. Within the last few days the iris has cleared, the striæ have appeared, but the occlusion mainly remains. Sight has improved so that he can count fingers dimly (an iridectomy will have to be made before he gets much sight). The ball is not the least atrophied or tender, and I am inclined to think that the iris was the only part of the uveal tract much involved. As the patient was in perfect health at the time of the operation, and care had been taken to have the bowels previously evacuated; as the operation was made with the most satisfactory steps, no accident occurring during or after the operation, I can think of no other cause for the bad results than the cocaine used. If the iritis was due to the iritating effect of the cocaine, was it due to an impure quality, or are we liable to experience similar results from the use of any preparation? From the fact that the solution used in this case came from one of our oldest and most reliable firms, that of EDWARD R. SQUIBB, we should least expect a spurious article. Yet when we consider that we used this same preparation for some minor operations with decided irritant results, while with the other preparations the results were quite the opposite, we cannot help thinking that the exciting cause of the inflammation was the preparation used. I do not wish to charge the house of SQUIBB with sending out a spurious or dangerous preparation of cocaine; but if by mistake or otherwise, such an article has gotten into the market, it is eminently important that a warning be telegraphed to every oculist throughout the land, that further damaging results may not occur from its use.—DR. F. B. TIFFANY, in *Kansas City Medical Record*, January, 1886.

THERAPEUTIC USE OF PICHI.—Pichi (*fabiana imbricata*) Ruiz et Pavon, is a shrub about two metres high, which is frequently met with in Chili, and in the Argentine Republic, where it grows spontoneously, and where it is also used as an ornamental shrub. Its many small branches abound in small leaves in the form of sutures, imbricated with white flowers in long terminal bunches.

The resinous odor, slightly camphoraceous, the arrangement of the leaves, and the general aspect, seem to class it with the family of coniferæ. On examination, however, of the few white flowers which we find at the extremity of the branchlets, it is to be placed among the solanaceæ, section of nerviembricæ, and we recognize the specific characteristics of the fabiana imbricata, ruiz et pavon.

Pichi, much praised in South America for the cure of affections of the urinary apparatus, has been studied by DRS. RODRIGUEZ and DE MASCHI, who have found the following by analysis:

1. An essential, very aromatic, greenish oil, which solidifies after several days upon exposing it to the air, forming a stereopteinic.

2. A resin, greenish on account of the chlorophyl which it carries with it, aromatic on account of the essential oil which it retains—

characteristics, however, which are lost upon repeated purification. It is sponifiable with potash or soda. Its acid reactions are well pronounced. It corresponds with negative resins. Sulphuric acid colors it red, carbonizing it at a higher temperature, and transforming it into artificial tannin of chevreul. Nitric acid affects it quickly, coloring it red, and later, brown.

3. A fluorescent substance, dichroic, resembling very much æsculine, and its allies, pavine and fraxinine, crystallizing in acicular groups. Soluble in hydrate of ether, in alcohol at 80 degrees; little soluble in cold water, but sufficiently to render the liquid polychroic. Colorless when observed against the light, but of a magnificent blue with brown reflex, when it is regarded by reflection. An analogous substance is the pogonopus febrifugus or oran (cascarilla, quina couleur de mure). This substance is bitter, and without doubt its presence in the plant is connected with the properties of the plant.

Pichi is especially efficacious in the diseases of the urinary apparatus and of the liver. In cases of vesical catarrh, acute or chronic, following a mechanical cause, such as gravel, or calculus, or a uric diathesis, this remedy will quickly modify the urinary secretions, calm the irritability, and favor the expulsion of the gravel and calculi that can be passed through the urethra.

It modifies and cures also chronic purulent mucous secretions. Its action on affections of the liver must be attributed to its diuretic properties, though it is recommended for icterus, hydropsy, and dyspepsia due to insufficient biliary secretions. In this case the essential oil, when absorbed and carried into circulation, acts like a stimulant of the secretory apparatus in general, but the specific action of pichi is directed without doubt upon the organs of the urinary apparatus. It is used in the shape of a fluid extract, in a dose of from 4 to 6 spoonfuls per day, in cold water or warm.—*Les Nouveaux Remedies*, Feb. 15, 1886.

Manaca in Muscular Rheumatism.—Inasmuch as I can not be with you, I have determined to contribute a short dissertation on the Use of Manaca in Muscular Rheumatism. My experience with this drug has been solely in the form of fluid extract, and is mostly a personal testing, confirmed by observation of its effects on others.

Given, a case of rheumatism with soft skin and absence of feverish symptoms, affecting more especially the muscles, including their tendons, perhaps occasionally affecting the joints; the pain being dull and heavy, but continuous, and

℞ Manaca, ʒ j to jss.
Water, ʒ jv.

Teaspoonful three times a day will give quicker relief than any remedy I know of.

I can find no positive symptom of its action save that the pain gradually fades out, and that the parts affected gradually assume their natural suppleness and strength.

There is no tonic feeling as there is with macrotys. Neither can I see that it acts on the digestion or any part of the system save that affected by pain. It is true that I have taken it only in the dose indicated. It is the first medicine that ever gave me relief, and I highly value it. The indication which guides me to its use is simply where I find none special for anything else. Or, to give positive statement, where the pain is continuous.

I am 59 years old; have been afflicted with muscular rheumatism ever since my fourth year, within my own distinct memory. My life has been one of great muscular exertion; but I find the remedy to have the identical effect on those who have led lives of comparative idleness.

In closing, I want to say, that in my opinion no remedy has been found for the condition of the system that produces the phenomenon called rheumatism. What is that condition, or those conditions? Can anyone tell? Mine was an inheritance, as the condition which results in cancer or phthisis is an inheritance.

As physicians, of course, we relieve, but do we ever cure? How far have we penetrated within the temple of knowledge? Or, rather how little distance have we traversed? We ought, sometimes, to try to get our bearings.—*Exchange.*

Treatment of Phthisis by Subcutaneous Administration of Carbolic Acid.—Dr. Filleau, of Paris, reports that he has derived excellent reslts by the employment of carbolic acid hypodermically in the treatment of phthisis pulmonalis.

Being a firm believer in the parasitic origin of phthisis, he searched for an antiseptic or germicide which could be injected into the blood without harm to the patient. Iodoform was tried, and failed. But chemically pure carbolic acid seemed to answer all requirements. It is easily mixible with water, can be injected without pain, and never causes abscess or phlegmosis. Moreover, it has been demonstrated by Paul Bert that carbolic acid is eliminated by the lungs as well as by the kidneys, thus reaching the favorite seat of the bacilli, and acting like an antiseptic lotion. It was further observed that the bacillus tuberculosis was quickly destroyed by very weak solutions of this antiseptic.

Fhe formula for the preparation of Dr. Filleau's solution is:

℞ Acid, carbolic, c. p., 1 pt.
Glycerini puri, 4 pts.
Aq., distillat, 94 pts.
M.
Sig.—100 minims once a day, or every other day, according to the case.

The carbolic acid must be perfectly pure. That having a rose color should never be employed. The treatment should be continued persistently unless symptoms of intoxication appear, in which case the medication should be dropped.

Dr. Filleau has employed this treatment with very satisfactory results for two years. Several of his patients have been exhibited at the hospital Cochin to the profession. He summarizes his theory and treatment as follows:

1. The parasitic origin of tuberculosis being admitted, carbolic acid, c. p., must be consid-

ered the best antiseptic to be employed in the treatment of tubercular diseases.

2. Carbolic acid is the only germicide which can be administered subcutaneously for a long time without danger.

3. The safety and toleration of carbolic acid given hypodermically have been thoroughly demonstrated.

4. By means of this treatment, the general condition of the patient is rapidly improved, and the local lesions are favorably modified.

5. The treatment in every case should be persistently carried out.—*Buffalo Med. and Surg. Journal.*

HYDRASTIS IN THE TREATMENT OF GRANULATED EYE-LIDS.—MISS W—— called at my office December 3d. Said she had been afflicted with sore eyes—granulated lids—for some time, and that she had been treated by DR. M——, allopath, for three months and had received no benefit, in fact, became worse. And that her friends had advised her to try the new doctor.

I concluded that DR. M—— had about exhausted the cut-and dried routine of treatment, and that in order to succeed I would have to resort to something out of the usual line.

Knowing the beneficial influence of hydrastis on the mucous membrane as an astringent, I concluded to give it a trial. I used the specific tincture, full strength; one drop applied morning and evening with an ordinary dropper. On the evening of the second day the inflammation was considerably reduced and a general improvement was noticeable. In fact, she stated (to use her own words), "I believe, doctor, they are about well."

I then gave her the necessary instructions to continue the treatment at home. That was the last I saw of my patient (likewise my fee). But, meeting a friend of hers on December 10th, I inquired after my patient, and was somewhat surprised to learn that she was entirely well, and that she had gone to work (dress-making).

The above treatment may not be new to some; however, I do not remember having seen any reports of the use of hydrastis in the above disease.—DR. F. P. MITCHELL, in the *Cal. Med. Journal.*

A NEW URINARY TEST.—There is often considerable difficulty in making a positive diagnosis in the early stages of typhoid fever. Malarial fevers, acute general tuberculosis, and other febrile conditions may resemble for a time the early stages of typhoid. For this reason the peculiar urinary reaction occurring in typhoid and typhus, to which attention was called by DR. DANA, at a recent meeting of the Practitioner's Society is of much interest. This test consists in adding to the urine an acidulated solution of sulfanilin acid. The mixture is then made alkaline by the addition of ammonia, and allowed to stand for seventy-four hours, when a greenish-colored deposit of phosphates occurs. This reaction is scarcely ever seen in the urine of healthy or afebrile persons, and very rarely, indeed, in the urine of febrile cases, except those of typhus, typhoid fever, and measles. Consequently, its appearance in the urine may have a strong and important confirmatory value in diagnosis.

PROF. EHRLICH, to whom we are indebted for this test, believes also that it has a prognostic significance in certain cases of chronic phthisis and pneumonia.—*Exchange.*

ELECTROLYTIC THERAPEUTICS.—At a recent meeting of the French Academy, M. BROUDEL read a paper on the introduction of certain medicines into the system by means of electricity. As an example, in order to introduce iodine into the system, a rubber plate, moistened with a solution of iodide of potassium, is placed upon the surface of the body. Over this plate the negative pole of a battery is applied, while, as it is stated, "the positive pole of the battery is placed upon a part of the body towards which it is desired the iodine should travel. The iodine separates from the potassium, which remains at the negative pole, and passes with great rapidity through the tissues toward the positive pole." M. BROUDEL says he has in this way cured uterine fibroids, rheumatic ovarian neuralgia, and several cases of chronic rheumatism. But, if he is correctly reported, he seems to be ignorant of the fact that a metal which is developed at the pole does not at all "travel" thither. A much more sensible proposition was that to make a copper bath, the electrode to gather out of the system any mercury or arsenic which it might contain.—*Med. Press and Circular*, Jan. 20, 1886.

QUILLAJA BARK IN EMPHYSEMA.—In the Cent. f. Klin. Med. KOBERT recommends senega as an expectorant in emphysema, in the second stage of acute bronchitis, in chronic catarrh of the lung, in broncho-blennorrhœa, and in the latter stages of pneumonia. This drug, however, is dear, has a bad taste, and is badly borne by the stomach in many cases. A thorough investigation has informed the author that senega contains two active glucosides. On analysis of all similar drugs, he has found that the bark of quillaja saponaria molina contains the same alkaloids in five times the amount that senega does. Quillaja bark is only a tenth the price of senega root. The taste of quillaja is not unpleasant. On exhibiting the drug, the author found that—(1) it is better borne than senega; (2) the remedy is gladly taken, even by children, on account of its sweet taste; (3) its power as an expectorant is beyond question. A decoction of the strength of 5 in 200 was used, and a tablespoonful given to adults, a teaspoonful to children. It may be obtained from GEHE & CO., in Dresden-Neustadt.—*Med. and Surg. Reporter*, Dec. 12, 1885.

AMERICAN "HOPEINE" IN PARIS.—Our manufacturing pharmacists will doubtless feel called upon to look into the matter of an accusation lately brought against them at a meeting of the Académie de Médicine. According to the account given in the Union Médicale, M. DUJARDIN-BEAUMETZ was about to undertake some experiments with this new remedy, when he was warned by a pharmacist, M. PETIT, that the specimen, which had come from New York, might not be genuine. On analysis, the specimen was found to have all the chemical characteristics of morphine, from which it differed only in its odor, due to the addition of

a little essence of hops, and in its price, which was far higher than that of morphine. "Either hopeine has the same reactions as morphine," says M. DUJARDIN-BEAUMETZ, or the wild hop of America contains morphine, or, finally, under the name of hopeine foreign druggists sell morphine scented with hop. The latter supposition is the most probable."—*N. Y. Med. Journal.*

CALOMEL AS A DIURETIC—The action of calomel in causing diuresis in morbid conditions with dropsy, is not generally recognized. In health, indeed, it may be said that the drug has no such action. DR. JENDRASSIC has found in cases of cardiac dropsy, that calomel in appropriate doses causes well-marked diuresis, a "sort of diabetes insipidus," by which the results of want of cardiac compensation, dropsy and œdema, are dissipated. The effect comes on within twenty-four hours; one and a-half grain of the drug being given three to five times a day. No diarrhœa is usually produced; but, in some cases, it had to be prevented by the administration of laudanum. Salivation and stomatitis were obviated by the prescription of a chlorate of potash gargle from the first. The result in all cases in which the treatment was adopted, was beneficial; no unfavorable depressing symptoms being noticed. —*Brit. Med. Jour.*

THE PHARMACEUTICAL AND THERAPEUTIC USES OF ALGIN.—MR. WATSON SMITH calls the attention of pharmacists and physicians to a new product, algin, discovered by STANFORD. It is a residue product of the wet way of obtaining iodine from certain marine algæ, being a nitrogenous principle, closely resembling albumen except in not being coagulated by heat. It forms perfectly definite alginates with metals. The alkaline and earthy-alkaline alginates are soluble, but the others are insoluble. The double alginates are easy of preparation, and almost all of them are soluble. Besides possessing many curious chemical properties, giving promise of extensive applicability in pharmaceutical and other processes, algin has a notable alimentary value, and may be advantageously substituted for gumarabic in the preparation of a great number of dietetic and medicinal products.—*Physician and Surgeon*, January, 1886.

HYPNONE AS AN ADJUVANT TO CHLOROFORM.—M. DUBOIS ("Revue médicale française et étrangère," Jan. 16, 1886) states that, when a hypodermic injection of a sixth of a grain of hypnone has been given to a dog, the animal can be anæsthetized by making it breathe air containing four per cent. of chloroform, a mixture which, as M. PAUL BERT has shown, never produces anæsthesia under ordinary circumstances. The anæsthesia ceases in about an hour, although the dog may continue to breathe the mixed gases. The same result may be produced by giving twice the amount of hypnone by the mouth. The practical value of these facts lies in the probable diminution that can be made in the amount of chloroform required for anæsthetization.—*New York Med. Journal.*

BROWN-SEQUARD'S MIXTURE FOR EPILEPSY:

Iodide of potassium, 8 parts,
Bromide of potassium, 8 parts,
Bromide of ammonium, 4 parts,
Bicarbonate of potassium, 5 parts,
Infusion of columba, 360 parts.

Dissolve. A teaspoonful before each of the three principal meals, and three dessertspoonfuls on going to bed. The solution should be given diluted in cases of idiopathic epilepsy.

If the pulse of the patient be feeble, the potassium bicarbonate is replaced by ammonium carbonate, while for the 360 parts of infusion of calumba there are substituted 90 parts tincture of calumba and 270 parts of distilled water.—*L'Union Médicale*, Dec. 31, 1885.

INJECTIONS OF CHARCOAL WATER IN TYPHOID FEVER.—As a method of partially disinfecting the intestinal contents of typhoid patients, and thereby not only rendering the stools inoffensive, but also diminishing the danger of auto-infections, DUNAL strongly recommends the use of injections of charcoal water. A soupspoonful of poplar charcoal is well mixed with each injection, which is repeated from two to three times daily. A case is cited in which the use of this absorbent rendered the intensely repulsive dejecta absolutely inodorous, and in which great meteorism was immediately diminished and finally disappeared.—*L'Abeille Médicale*, Dec. 21, 1885.

SUBCUTANEOUS INJECTION OF OXIDES OF MERCURY.—Subcutaneous injections of the black and red oxides of mercury have been recently tried as an anti-syphilitic treatment in the Lazarus Hospital, at Warsaw, by DR. VON WATRASZEWSKI, who has charge of the syphilitic wards. He finds that no inflammation and scarcely any pain is produced, no abscess having occurred after any of the 200 injections he has performed. The therapeutic results were most satisfactory both in recent cases and in those where the disease was of old standing. —*London Lancet.*

NEW ANTISEPTIC DRESSING FOR USE IN THE FIELD.—DESQUIN has recommended a very compact, simple and antiseptic dressing for use in the battlefield. It consists of filter-paper, sterilized by a prolonged heat of 248° F., which is then immersed in any desired antiseptic solution, and slowly dried. Seven or eight layers are applied to the wound, covered with gutta-percha, and held in place by a few turns of roller-bandage.—*Revue de Thérapeutique*, Dec. 15, 1885.

STIGMATA MAIDIS IN HEART DISEASES.—For diseases of the heart accompanied by œdema of the lower extremities, the Centralblatt fur die Gesammte Therape recommends the extract of stigmata maidis. It is well borne, produces speedy relief, is an active diuretic and acts much more speedily and satisfactorily than digitalis. The dose is from 30 to 45 grains, given one hour before each meal. The general condition of the patient is said to improve rapi[illegible] *Med. Index.*

The Medical Age.

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Original Articles.

CLINICAL LECTURE.*

BY PROFESSOR HORATIO C. WOOD, M. D., OF PHILADELPHIA.

NEURITIS.

The first case that I have to show you to-day, gentlemen, possesses some of the characteristics of a disease that has been attracting considerable attention for the last year and a half. From this man's history we learn that one evening the muscles of his arms felt a little stiff and rigid; the next day there was some soreness, though he was able to keep at work. It was a rainy day. The next morning he was unable to move his arms; this condition continued for a week, when he gradually recovered the use of his fore-arm, though the other muscles of the extremity continued paralyzed. He had, in the beginning of the attack, which was some six weeks ago, intense soreness over the location of the brachial plexus. There was no loss of power in the legs. Now this would seem, at first blush, like a case of polio-myelitis. The muscles atrophied, especially noticeable in the deltoid and pectorals. There is also diminution in the electrical reaction of these muscles, not very marked as yet, but still sufficiently pronounced for us to be quite sure of its presence, the muscles do not respond as they should normally to the slow, interrupted faradic current, which shows the commencing reaction of degeneration. Now when we have a disease characterized by atrophic changes in the muscles, where should we look for the lesion? Well, in general terms, we must say that the lesion is always peripheral, that is to say it is located in the cord or in the nerves, it is a disease either of the multipolar cells in the anterior cornua of the cord or of the nerves. So when we have atrophy we know that there is an affection of the trophic centres. Now what do we call that form of disease that is due to a rapid wasting of the cells of the anterior cornua? Acute polio-myelitis. Now you have heard the history of this case, and I have told you that it is very like that of polio-myelitis, but did you not notice one particular in which it differed from this disease, a sign that would cause you to say at once that it was not polio-myelitis. This symptom is the pain, which was at first so marked a symptom. These cells have no connection whatsoever with sensation, therefore when they are the seat of the lesion we do not have the symptom of pain, at the most we will have only formication in the part. Therefore, judging from the presence of pain and tenderness along the course of the brachial plexus I would conclude that we have not here a case of simple polio-myelitis. Have we then polio-myelitis complicated with some other disease? I think not, though the only reason I can give you for this opinion is the same reason that the darkey gave for putting his head through a hole that a cannon ball had just passed through. He argued that a ball never went through the same hole twice; so I reason that it is not at all likely that we would have two diseases of different parts at the same time in the same person; of course we could have such an occurrence, but I do not think it very probable. Therefore it is not likely that we have a case of polio-myelitis. Well, then, what have we? Remember that we have a distinct history of brachial tenderness, this tenderness existing also down the arm. Upon pressure and manipulation I fail to elicit any tenderness now, but it was well marked in the early part of the disease. Now, then, when we have a history of pain and tenderness along the course of nerve trunks, associated with loss of mobility and wasting of the muscles, what condition have we? Why, of course, neuritis, and inflammation of the nerve. Then we conclude that in this case we have neuritis of both brachial plexuses. The cause of this case was exposure to cold and over-exertion. It is a condition similar to sciatica. Now, when I first brought this case before you, I supposed, as I said, that we had an illustration of a disease that had attracted much attention during the last year and a half, and in this connection, I had in my mind simple multiple neuritis, dependent wholly upon cold or over-exertion, but I now find there is a rheumatic element in this case, and that this had much to do with the etiology is proved by the fact that the salicylates had a most happy effect on the progress of the case. The impression was most rapid and so far as future treatment is concerned, it will be directed locally to the muscles and will consist in electrical stimulation, combined with the internal

*Delivered in the University of Pennsylvania, Feb. 12.

use of strychnine, massage and voluntary exercise of the muscles. There is not any active condition of disease now, and the treatment should be similar to that for paralysis from pressure. This is a very instructive case, as it demonstrates to us how the rheumatic influence may produce a condition closely simulating organic disease of the cord, and it is instructive in teaching us how powerful are the salicylates in such conditions.

POLIO-MYELITIS IN CHILDREN.

Here we have two little children, one aged eighteen months (a girl), the other (a boy) a little over three years old. The little girl, we learn, was sick, when fourteen months old, for three days, with fever, as the prominent symptom, and five days later it was noted that she had some trouble in walking. With the boy, it came on gradually about three years ago, succeeding an attack of bronchitis, but I do not think there was any connection between the two; the bronchitic condition entirely disappeared before the paralytic condition came on. You will notice that the feet are somewhat drawn inwards, and there is some atrophy of the muscles of the legs, particularly the perinei and the extensors. These muscles are rigid. Remember, as a fundamental rule, that there are two varieties of paralysis in children, and that nine out of every ten cases belong to one of these classes:

1. Where there is relaxation of the muscles.
2. Where they are rigid.

In the relaxed form we have what we call "infantile palsy;" in the rigid variety we have "spastic infantile palsy." In the latter variety the lesion is located in the brain, there is a chronic cirrhosis of the cortex and descending neuritis, with, finally, an involvement of the lateral columns of the cord, and such a condition usually dates from birth. In cases like these before us there is a polio-myelitis, the lesion is situated in the anterior cornua of the spinal cord. Some of these cases are due to a primary disease of the motor nerves, the condition extending up along their course to the cord. These two cases exhibit very diverse modes of development. In the one the development was slow, as we not infrequently see it; indeed, in many cases the onset is so gradual that it is utterly impossible to set a time at which mobility first became impaired, while in the other cases the child will be seized with a high fever, and supposing it to be due to some other cause, the limbs will not be examined, and the true condition of affairs will be overlooked. We may suppose that the child has a remittent or intermittent fever, and so treat it, and when it gets up will be more or less paralyzed, and we will be correspondingly chagrined. To obviate this source of error we should make it a rule to examine the limbs in all cases of fever. I do not think that the bronchitis had anything to do with the production of the disease in this case, unless, possibly, it may have favored its occurrence by reducing the general strength. I have seen such cases caused by over-exertion, and from this fact you should issue a warning to mothers who seem to take delight in having their little children tramp all over town with them. It is astonishing to see how long a plucky boy of four will walk without complaining, yet he is subject to this over-exertion at great risk. Now, another peculiar feature in these cases is that it is usually the same group of muscles that are affected, namely, the peronei and the extensors; why this is so I do not know, but I do know that it is a fact. You will notice how the legs are bluish, purplish and cold to the touch, evidencing interference with the nutrition. Here I have brought out an interesting point that should serve as a warning to you. At first I thought that the patella-reflexes were exaggerated, but I find that this apparent exaggeration was merely due to the position of the limbs that had placed the muscles on the stretch; when I relieve this strain, I find the reflex but normal.

Now comes up the question of prognosis. This must always be formulated only after a careful consideration of the electrical reaction of the muscles, in connection with the date of appearance of the paralysis and the rapidity with which the degeneration is going on. Take, for example, this child, in whom the disease has existed for three years. If, when we examine the muscles, we find that they will respond to galvanism but not to faradism, we can say that the case will probably be benefited by treatment, because the presumption is that the cells of the anterior cornua of the cord have not entirely lost their power. Therefore, we have a right to hope that if by artificial means we can bring the muscles up to their normal condition of action, there may be enough power left in the cord to keep them there. If, on the other hand, we find no response to galvanism, it is hardly worth while to do anything. Then, again, if we have a case of only a few weeks' duration, progressing on a downward course, and all response to faradism gone, we must be very careful about our prognosis, for the case is then going from bad to worse. The treatment must consist in the use of strychnine in large and ascending doses continued for a long time, and in connection with it, electrical stimulation of the muscles. We should select that form of electricity with which we are able to receive the greatest contraction of the muscles.

CHOREA.

Look at these little girls, gentlemen, and I

think you can anticipate me in a diagnosis. Yes, you are right, they have chorea, and it is very instructive for you to note that they have it in that stage when it is often mistaken for restlessness and badness on the part of children, for which they are, not infrequently, punished. Now, this first case had chorea last May, and under treatment it apparently entirely recovered, but three weeks ago it reappeared. Here is a very interesting feature, for my experience teaches me that chorea is an epidemic disease of spring as much so as chills and fever are of the fall. This second child complains of pains in the legs, which serves as another illustration of the close connection which I believe to exist between chorea and rheumatism, and I tell this father to keep his child in the house in this wet weather, or he will have her laid up. Both these cases are improving under FOWLER'S solution in gradually increasing doses.

HYSTERO-EPILEPSY.

I am going to tell you about epilepsy as we find it pure and simple, and also about the great variety of manifestations that we find in connection with this hydra-headed disease. To some of you, it may seem like supererogation for me to run over the typical epileptic paroxysm, but that I may clearly set before you the numerous variations from the type, it is necessary that we should assume a typical case as our basis. Let us first see, then, what are the phenomena of a typical epileptical paroxysm. You must remember that in many cases the very first warning of an approaching attack is the aura, which I may describe as some kind of a sensation, arising in some portion of the body and ascending upwards towards the neck and when it reaches that point, or it may be that it gets to the head, unconsciousness supervenes. The aura may have its seat of origin in an extremity; thus, it frequently arises in the hand, but less often in the foot, or it may start from some portion of the body and we not infrequently have its point of origin stated to be the epigastrium. Sometimes it arises in the lungs or the point of departure may be referred to the laryngeal or œsophageal regions. Rarely, it is stated to arise in the face or it may be even in the head itself. As a rule the aura is purely sensory in character, that is to say, it consists of a sensation of a peculiar character that is apparent to the individual himself, but that is not appreciable to a looker-on. But sometimes the aura is of a motor nature and will consist of a localized cramp or spasm. There are such things as purely psychical auræ, where there is neither sensation nor motion and where the warning consists only in some thought or in some temporary perversion of the organs of the special senses, in certain visions or peculiar and characteristic noises or in certain other cases in the perception of peculiar odors always, and only, experienced just before the onset of an epileptic paroxysm. This is a very curious fact and one that your future observation will confirm, that though the nature of the aura may differ greatly, as I have said, in different cases, yet in each particular whatever may be the peculiar aura, the same special phenomena will persist in that special case; in other words, the nature of the aura will not vary in the same individual, so that if an aura be present it will be always the same, and thus the patient can count on its occurrence as the warning of a coming paroxysm. The case has become almost historical, where the aura consisted in the vision of a woman wearing a red cloak, with a hammer in her hand, who, approaching the patient, struck him in the face; at the moment the blow was delivered the paroxysm occurred; in this case the aura was always the same, it always consisted in this peculiar vision.

Now comes the second stage; as the aura is completed, there is uttered a peculiar, terrible, ringing sound that is known as the epileptic cry, that is very characteristic, and that, once heard will not soon be forgotten. It is caused by a spasm, by a rigid contraction of the respiratory muscles; the glottis is made rigid and the air rushing through the rigid glottis gives rise to the peculiar cry. After the aura and the cry comes a period of tonic convulsion, when the patient is rigid and his face usually pale; this stage of tonic convulsion usually lasts from a few seconds to a minute, and is succeeded by wild, furious clonic convulsions, when the body and extremities are tossed about in every conceivable manner. There is now complete unconsciousness. This stage lasts for from a few seconds to a few minutes, and is followed by coma and profound sleep.

Time is wanting for me to discuss all the little phases of the typical convulsion, so that I will go at once to the variations that we have constantly offered to us. I want to first enunciate a few facts, and the first one is that any of the stages described or any of the symptoms of any stage, may be wanting. I would say, as a general rule, that the aura is absent in about one-half of the cases, while the cry is still more frequently wanting. It is not an uncommon fact for the tonic or clonic convulsions to be absent, and herein we see some of the peculiar features of this very peculiar disease. In such cases we can only say that the epilepsy is a discharge of nervous force, occurring at intervals, without any cause that we can fathom, and that obstinately resists all remedial measures. I once treated a little boy who had, at intervals, a violent paroxysmal pain in the abdomen, apparently causeless. He would run to his mother, screaming with the agony of his suffering, but in a short

time this pain would spontaneously vanish. Well, this pain was a true epileptic paroxysm, although the disease was manifested in no other way. It is of great importance, from a diagnostic point of view, that you should recognize the fact that the movements of epilepsy are not purposive, for herein you will find the difference between true epilepsy and hystero-epilepsy. There is what is known as epileptic automatism, in whith the movements are apparently purposive, but they are not so in true epilepsy. In hysteria or hystero-epilepsy there will be a convulsive movement of the hand, arm or leg, simulating a similar movement in health. In epilepsy there is no emotional disturbance, such as we see in hysteria, save in those cases where there is what I have spoken of as a blind discharge. In hysteria, we have the globus hystericus to help us to a diagnosis, but we may also have a somewhat similar phenomenon in epilepsy and it is very important that you should not forget this fact.

Well now, to come to our patient, here is a boy about 14 years old, who for two years has been not only "the joy of his mother's heart," but has been to her a constant torment and source of worry. Two years ago he received a very bad shock to his nervous system from a severe fright, and ever since that time he has been subject to a succession of paroxysms, very varied in character. We learn that his movements are more or less purposive, which, as I have told you, is a rare fact if this is a case of true epilepsy. The other day I was standing in the ward of the Philadelphia Hospital, when I heard a terrific scream, and the attendants all rushed in a certain direction. I looked over and saw a huge, burly negro who was making a bee-line for the door. The nurses seized him, threw him to the floor and he at once went into a full-fledged paroxysm of epilepsy. If the man had been allowed to run, he would have gone on, may be for a mile, but he would not have had a fit, the discharge of nervous energy was manifesting itself by forcing this man to run furiously, but when its discharge in this direction was forcibly interfered with, its energy was diverted from its original manifestation and the man had a fit. This was a case of running epilepsy. Some of you have, no doubt, heard of the master-builder of Paris, who was the subject of a very peculiar type of epilepsy. He would be seized with an attack when on a scaffold at the top of a high building; he would run, leap, jump, never falling or stumbling and finally reach the ground in safety, being all the time unconscious. Now, in such cases, let the man run and he will not have a convulsion, but stop him and you will divert the nervous energy. This boy has no convulsions, but he has enormous emotional disturbance, which is greatly increased by observation from outsiders, and in this fact we have a means of distinguishing from true epilepsy, for in the latter the patient is totally oblivious of persons and surroundings. I venture to say that this boy never hurts himself, which true epileptics frequently do; yes, his mother says that he did once fall against a stove and burn himself, which looks more like true epilepsy. Now, I ask the mother whether he ever shows that he is conscious of what has happened during the paroxysms; if she speaks to him during a fit, does he answer? I learn that he does not answer, but he "tears around like wild" and tears his clothing. Does he ever bark or bite, or make peculiar noises, like dog or any other animal? Well, about a year ago, he did bite his father, who is not very strong and who was trying to control him when he was in a fit. One means of recognizing hysteria is that such people frequently resort to mimicry of beasts; they will perform actions like dogs and other animals. This fact will be frequently told you when the anxious parents or friends imagine that the patient has hydrophobia. Now, the truth is that in true hydrophobia the patient never bites and never attempts to destroy. I once cured a boy who was supposed to have hydrophobia, by throwing him into a cold bath. I was called in great haste away out to Manayunk to see this boy, being told that he had hydrophobia, and that he was racing around, biting at and tearing everything within his reach, and barking like a dog. Of course, I found the family completely demoralized, for this was their oldest boy, and they feared to lose him. The cold bath knocked the devil out of him, and the cure was rapid and complete. It is a curious fact, but it is a fact, that when we come to children the usual law of the relation of epilepsy to sex does not hold good; it is reversed. While in adults the rule is that we find by far the greatest percentage of hysterical cases among females, when we come to children the reverse is just the rule. I do not think that I have seen more than four or five cases of epilepsy in young girls, but, within the past two weeks I have seen six cases in boys. When we come to adults we find that out of every one hundred cases, ninety-nine occur in females. I had a peculiar experience the other day at the Philadelphia hospital. As I was going through the wards, one of the residents came hurriedly to me, asking me to see a patient of DR. MILLS', as he was not in the hospital, and the man was suffering from spinal meningitis and was very ill. The attendants were holding him down. When I asked him how he felt, he replied in a very peculiar tone of voice: "This poor body is racked with most indescribable agony." From his very tone I felt that he was shamming, and I told the resident that he had no meningitis, to club him over the head and put him in a tub of cold water. It was not necessary to actually

resort to this treatment, for my words miraculously cured the man. To go back, I would say that we will find three cases of hysteria in boys to one in girls. I do not know why, but I am strongly inclined to believe that it is related to the sexual organs, and that it is very frequently dependent upon masturbation, or the existence of an elongated and contracted prepuce. We read very often about reflex convulsions, which are frequently attributed to reflex irritation from the genital organs. Now I believe that five out of six of such cases are hysterical; they are not truly reflex, and they are to be relieved by surgical measures. Some years ago I reported myself, a case of reflex convulsions, which I then believed to be reflex, and which I considered was cured by the removal of a scar, but in the light of my later experience I believe that it was a case of hysterical convulsion. You will not infrequently have cases where circumcision or stretching of the prepuce will cure the convulsions. Age is no argument against the habit of masturbation, for the nurse may teach such a habit to very young children; so young that they do not really know what they are doing, and the nurse herself is ignorant of the habit that she has cultivated. I would say that in all cases of hystero-epilepsy or of irregular convulsions, you should examine into the condition of the genital organs, and in many cases you will find the basis of the trouble to be there located. There is a peculiar form of the disease, wherein there is a mimicry, so to speak, where the patient will imitate certain acts that are observed in others. Thus, in an orphan asylum on one occasion, an outbreak of this kind occurred. It was truly epidemic; all the children were affected, and they did that which they saw others do. All remedies, even the threat to use the hot iron, were unavailingly tried. Finally, I hit upon the following happy expedient. After starving the children for eight hours, they were allowed to gorge themselves with the most desirable food and sweet-meats; then one child was seated on a chair and the others facing. To the one child I proceeded to administer ether, not enough to produce anæsthesia, but sufficient to make him sick at his stomach and cause vomiting. When the other children saw this one enveloped in his own vomit, and presenting a most disgusting sight, there was no inclination towards mimicry and thus this habit that was really a disease, was broken up. Here there was a purely psychical neurosis; there was no physical element about it. Now this boy claims that he cannot lie on his back, and for two years his mother or his aunt have been obliged to sit up all night with him. I would advise them to take him by the nape of the neck and plunge him into a cold bath, then I imagine he would be willing to lie on his back. Now gentleman, I think that this boy's "little tool" is at the bottom of his trouble, and if he does not stop his nonsense we will cut it off; if he does not improve in ten days, we will cut it off. (This was said before the boy, for its moral effect.—*Rep.*)

In pursuing the subject of epilepsy let me ask you to carefully note the physiognomy of these two patients. Of course, the appearance which they present is not absolutely diagnostic, but it is by attention to these seemingly trivial details that we are enabled to shape our diagnosis. Of course we must not jump at conclusions, but these facts will enable us to see the drift of the case, and will tell us where to look for facts upon which to rest the diagnosis. It is these little points, the attention to which makes the difference in doctors; he who notes them is like the man going out into a marsh for terrapin, who knows by the presence of certain holes and signs where to probe for them, while he who neglects these little landmarks is like unto him who goes blindly probing about the marshes without any point to guide him as to the whereabouts of the terrapin. Learn to read the faces of your patients so that from them you will derive hints as to where to look for the disease. Now notice the shape of this young man's head; see how heavy, how lethargic is his expression, which is almost characteristic of advanced epilepsy. Note how thick are the lineaments; there is a want of a clear cut about the features, that, as I say, is almost characteristic. This young man is nineteen years old, and his fits commenced about fifteen months ago; the other patient is sixteen years old and the disease began, with him, eleven months ago. Now, as to age, I would say that seventy-five per cent., certainly sixty per cent., of all cases commence before the twentieth year of age, and eighty per cent. before the thirtieth year, and when a case commences after the thirty-fifth year it is almost sure to be not true idiopathic epilepsy, but to be epileptic form and due to some cause, as for instance, a traumatism. I am quite sure that I have not seen two cases that developed after thirty-five years of age. This oldest boy has not the aura, and when I ask him how he feels just previous to an attack, he says that his neck feels swollen, which you might mistake for the globus hystericus. Upon further examination, we find that he has an epigastric aura; the sensation arises in the stomach and when it reaches the throat the fit comes on. He does not have the peculiar cry, and there is not the pallor I have spoken about. In the younger boy there is no aura. Neither of the patients bite the tongue, which is rather odd, as this almost always occurs. Well now, the great practical point arises as to how we are to treat cases of epilepsy. I am inclined to believe that we do not pay enough attention to the importance of regulating the diet in the

treatment of this disease. My experience of late causes me to think that we can hope for the most good from a purely vegetable diet. I have now a case under treatment where the patient will go for months without a fit, as long as he restricts himself to a vegetable diet, but as soon as he eats meat, if it be only one chop, he will have a recurrence of the fits, even though he may continue to use the bromides. I intend to practically test this question by placing a whole ward of epileptics in the Philadelphia Hospital on a purely vegetable diet, if I can do so without creating a rebellion, for I fear that those people would rather have their meat and their fits together, than to be without the fits if this immunity entailed a deprivation of meat. I would say that the nearer we adhere to a strictly vegetable diet, the better chance we will have to hold the fits in check. It is essential in the treatment that we should regulate the bowels; we do not want to purge the patient, but he should have a daily soft stool. The only drugs that can be recommended as of any service are the bromides, and I do not think it makes any difference which bromide is used, though I suppose we will get the best results from a combination, for, after all, it is the bromine that does the good. We might get good results from hydrobromic acid, but this drug will derange digestion; hence its use is contra-indicated. When the fits occur in groups, with intervals between each set of fits, then I have found that the hydrobromate of hyoscine will lessen the number and severity of the fits in each group, and while I have not had any very great experience with it, yet I mention it as a remedy worthy of trial. When given at night, it seems to suppress the fits. The prognosis in epilepsy is always unfavorable, I cannot recall a case that has really been cured; there are lots of cases reported as cured in the medical journals; indeed, it would seem from these reports that everybody can cure epilepsy, but I am very free to say that I do not know how to do so. I can reduce the frequency of the fits; I can keep down the devil, as it were, but every now and then, when the lid is taken off, he will pop up again. If we hope to do any good it is of the utmost importance that we should commence our treatment early and continue it perseveringly. Of course I recognize that it is a very difficult matter to induce a patient to keep up the use of the bromide if he has not had a fit for a year or two, but I would strongly impress upon you the rule that the longer the interval that has elapsed since a fit, the greater the necessity to persevere in the bromide, as then the chances for a comparative cure are all the greater. I believe that eclampsia in childhood is the fore-runner of epilepsy in later life. When we have a child in whom measles, scarlet fever, or any of the usual diseases of childhood are ushered in by convulsions or where constipation or an overloaded stomach will produce them, then I would say that such a child has a strong predisposition to the development of epilepsy in later life; its nervous system has been made in an unstable mould and will be easily deranged. If, then, we can do anything for epilepsy, it will be in such cases, where by approximate hygiene and remedies we may be able to ward off the developement of the disease. We should impress upon the parents of such children the importance of a proper bringing up. They should have plenty of out-door exercise, and the education of the mind should be decidedly secondary to that of the body; their diet should be carefully regulated and the bromides should be continuously used. This is the time to avoid the development; if there is any power to enable us to avoid this heritage of woe, now is the time to use it.

RHEUMATISM.

The next case that I bring before you is of an entirely different character, but it is one of great importance, as it demonstrates the difficulties of diagnosis that we will encounter in some cases. This woman has had some trouble with her arms for the past six months. She is married and has done her own house-work. She was not exposed to wet and cannot account for this trouble. Her hands get stiff and numb and she has pain in her shoulders; her arms feel weak, and, at times, she has shooting pains therein. The arm is sore to pressure. What is the matter? Yes, it does present some of the features of peripheral neuritis, but it is not that disease. Now, when I press on the nerve trunks I find sensitiveness, but I find the same when I press elsewhere, so that there is no reason to suppose that the nerves are especially sensitive; hence it is not neuritis. It is true, as you may say, that there are nerve filaments everywhere, and we, therefore, might have diffused sensitiveness in neuritis, but if such were the case the sensitiveness ought to be more marked over the main trunks; it is true that we will have currents in all the little branches of a torrent, but the current will be most marked in the torrent itself. Is it spinal disease? The universal tenderness would negative this view. Well, what is it? Rheumatism. You may think that I have done a lot of talking about nothing, about an ordinary case of rheumatism, but you see how such a condition might be due to more severe causes. Symptoms similar to this, but lacking the general pain, might be due to a diseased vertebra pressing on the nerves. The pain in the shoulder might be due to muscle strain. The crucial test is that she has improved under the use of salicylate of soda, which she has been taking for two days. We will now give her the iodide of potassium and later go back to the salicylate, apply cups to

the neck, and tell her to keep her feet dry and her hands out of the water. Hot water is an excellent derivative and if this woman's husband will pour down her back water, hot enough to make her feel like saying bad words, it will do her a lot of good. You will find this remedy very good in sciatica, particularly if the patient subsequently wraps himself in a blanket and takes a good sweat.

FIBROID AND FIBRO-CYSTS OF THE UTERUS.

BY O. E. HERRICK, M.D., GRAND RAPIDS, MICH.

These growths have been frequently described in text-books, journal articles, and lectures, and as all substantially agree, I will not enter into a detailed description of their structure or history; it is rather the purpose of this paper to consider the diagnosis, and especially the differential diagnosis of these abnormal and oftentimes bulky growths. How to detect them concerns the operating surgeon much more than how they came, or of what tissue they are made. There are numerous symptoms pointed out to us in the different text-books upon gynecology, by which we are told we may know a fibroid or "fibro-myoma," from the numerous other conditions which distend the female abdomen by occupying its cavity. Doubtless these signs are all sufficient for the majority of cases, and that by them the operator is enabled to, as a rule, distinguish between a fibroid and the many other abnormalities which modern abdominal surgery has uncovered, and whose safe removal in many instances, it has demonstrated. But in view of the fact that there are many recorded and authentic cases where some of our best surgeons and most noted gynecologists, have failed to make out their diagnosis of fibroids before opening up the abdomen, it would seem to demonstrate the danger of placing too much confidence in the rules laid down for our guidance in such cases. While a college professor, with a reputation for brilliancy in operating, and backed by the directors of the institution, may make this mistake, and defy the hiss and howl of his enemy, it is very necessary that the operator in private practice should *know* better; he must be absolutely sure of *his* diagnosis before operating, for in these days of many malpractice suits, it is only the professional sluggard who is likely to escape; the working and progressive man takes his reputation in his hand at each and every stroke of the scalpel.

EMMET, in his work upon gynecology, gives us a clear and concise statement of the rules governing the differential diagnosis of fibrous growths, and yet he made the mistake of cutting down and a fibro-cyst for an ovarian tumor; and he did not make this mistake alone either, for the operation was made after a consultation with DRS. SIMS, PEASLEE, and THOMAS, all of whom pronounced it an ovarian tumor. The reputation of these men protected them, though they were all familiar with the differential diagnosis. In that case they at least failed to differentiate, which in connection with other similar cases simply proves, if it proves anything, that we are not yet in possession of any absolute rule, or set of rules, by which we may know just what we have in a given case of abdominal distension. We can diagnose some conditions almost to a nicety, and yet we may meet our "Waterloo," at any time we assay opening the abdominal cavity for any supposed condition of disease. The rules as given by EMMET for making a differential diagnosis, are perhaps the best and fullest yet published, hence I give them in his language. He says: "When the uterus has become very much enlarged from the growth of a fibrous tumor, a certain gelatinous consistency can often be detected, which is very deceptive in giving the impression of fluctuation. But, as a rule, the uterus will not be found uniformly enlarged, and certain hard outgrowths will be detected, feeling much like fibrous nodules. The history will often furnish the best basis for forming a diagnosis. The growth will have been recognized for a number of years. A tendency to uterine hæmorrhage, either during the menstrual nisus, or coming on in the interval, may have been observed. This symptom, however, cannot be relied upon alone, since bleeding may occur with an ovarian cyst, and is not always attended upon fibrous tumors, unless the mucous membrane of the canal is encroached upon. The uterine canal will generally be found deeper than natural, and this should be received as suggestive of fibrous tumor. The the action of the kidneys is *never obstructed by fibrous growths*, as we have seen is always the case in the advanced stages of a rapidly developing ovarian tumor. The peculiar expression of the face, so characteristic of ovarian tumor, is *never* found with fibrous growths, nor is there the same loss of flesh; but general emaciation, from hectic, accompanies its last stages. When fibrous tumors become pedunculated, as sometimes occurs, it is often difficult at first to distinguish them from partially developed ovarian tumors. Time, however, will make the difference clear, long before the growth can reach a size calling for surgical interference." It will be seen that DR. EMMET clearly recognizes, notwithstanding the above, the many difficulties to be encountered in always correctly diagnosing a fibrous growth from an ovarian tumor by the following: "It has been claimed that the contained fluid may assist in diagnosis, but that too has sometimes failed, as there is more than one kind of fluid in some growths." He also says: "To this day we do not possess any perfectly reliable means for determining the

condition under all circumstances, and our most trustworthy guides are a highly educated touch and well-trained powers of observation." He further states in his work, that nine cases of fibro-cysts have been operated upon in this country through mistaken diagnosis of ovarian tumor, but adds that only a small proportion of them are ever published. If there has never been more than twice that number, it is an exceedingly fortunate circumstance, considering the difficulties attending the diagnosis of such growths, and it seems to me that it is the duty of every man making the mistake to publish it, and let the profession know all the circumstances leading to the error in diagnosis. Unsuccessful operations are often much more instructive than successful ones, if faithfully reported.

In addition to the differential symptoms enumerated above, there should be added the fact that there may be both fibroid of the uterus, or fibro-cyst, and the fibrous tumor of the ovary, and then it can only be distinguished by its hardness, or, if small, by its location; while if there happens to be a true cysto-fibroma of the ovary associated with the uterine tumor, any diagnosis must be doubtful, especially as the cysto-fibroma may occupy the whole of the broad ligament, reaching to and filling the whole space between the ovary and the uterus. Owing to the variety of this complication, the mistake is less liable to occur than is that of mistaking fibro-cyst of the uterus for ovarian tumor.

Owing to the similarity of EMMET'S case to the one I have to report, I will give that first, as the difference can be more readily comprehended. He says:

"In 1874 a woman applied to me at the Woman's Hospital for the removal of a large ovarian tumor. After a careful examination, and on passing the probe to the depth of seven inches into the uterus, I pronounced the case one of fibro-cyst, and declined to operate. As she was leaving the building, DR. SIMS met her and brought her back to examine her, as a matter of interest. He decided that it was an ovarian tumor. I then made a second investigation, and came to the conclusion that DR. SIMS' diagnosis was correct. I was the more confirmed in this opinion from the fact that after many attempts I could never again introduce the probe to a greater depth than two inches and a half. An examination with the finger gave no evidence from the vagina that the uterus was enlarged, but on the contrary, it seemed rather under size. DRS. PEASLEE and THOMAS subsequently saw the case, and both regarded it as an ovarian tumor. After opening the abdominal wall the adhesions were found to be so extensive that I could form no idea of the character of the tumor. It was tapped and freed sufficiently to admit of a more thorough examination. I found it adherent to the bladder, and along the brim of the pelvis to the pelvic fascia. I succeeded in separating it from the fundus of the bladder without rupture, but, notwithstanding the greatest care, I ruptured the iliac sheath on the right side on freeing an adhesion. There was a single adhesion, high up, to the rectum, which was in turn separated. The mass which remained, evidently included the uterus, but this could not be distinguished. A double ligature was passed and secured at the base of the mass. On making an examination I found that my first diagnosis was correct, and that I had removed the uterus just above the vaginal junction. The uterus had been drawn out to the length indicated by the passage of the probe, but the canal a short distance up made a sharp curve which I had once by accident passed. The woman never rallied from the operation and died in a few hours. This case is presented to show the difficulties sometimes met with in making a diagnosis between a fibro-cyst and an ovarian tumor."

It will be noticed that in giving a description of this case and the operation, the author has omitted giving in detail the symptoms which led him and his associates to diagnose an ovarian tumor, after he had once diagnosed a fibro-cyst. After passing a probe *seven inches* into the cavity of the uterus he had good grounds for suspecting he had something besides an ovarian tumor, and, undoubtedly, though he does not say so, he had other reasons for pronouncing it a case of fibro-cyst, and it would be interesting to know why they thought it a case of ovarian tumor, after it had been diagnosed a fibro-cyst; the author simply says he was unable to again pass the probe more than two and a half inches, in view of the fact that he had once passed it more than that, there must have been other and conflicting symptoms, which led them to suspect an ovarian tumor.

My own case was that of a woman aged 46 years, and the mother of four or five children. The growth was of about eight years' development, and had been very slow until within two years, in which time it had increased more in size than in all the preceding years of its existence. The patient had suffered very little pain or inconvenience during its whole growth, having had but one slight attack of cellulitis in the time. The menstrual flow had been regular during the whole time, and was neither changed in character nor unusually painful, and at no time had there been uterine hæmorrhage, either during or in the interval of the menstrual periods. Within the last two years she had some pain in the region of the kidneys, and at times partial suppression of the urine. When I first saw the case, which was only about a month before I operated, the growth

was as large as a full-term pregnancy. The abdomen was uniformly enlarged, and dull on percussion, with distinct fluctuation over nearly its whole anterior surface, the left side of the abdomen seemed to be a little the most prominent, and by closely feeling the whole surface there seemed to be a little inequality but nothing like a solid mass could be detected. By taking the tumor in both hands it could be readily lifted up, and was easily moved in any direction. All examinations per vaginam revealed the cervix uteri high up, and it could be barely reached where it rested up above the pubis, while the cul de sac was occupied by a mass with fluctuation to the left of it. The uterine sound indicated two and three-quarter inches, and the uterus appeared to have a moderate degree of mobility. At this time there was some functional disturbance of the heart and lungs, especially in the supine position. The bowels were becoming somewhat irregular, first constipated, then followed by diarrhœa, with a tendency to hemorrhoids. There was marked loss of flesh about the chest and neck, and as typical a look of "facies ovariana" as I ever saw in any patient. This case had been seen by a large number of physicians during the eight years of the growth of the tumor, and among the number was DR. BYFORD, of the Chicago Medical College, and other specialists whose names I do not remember. All of these physicians to a man pronounced it an ovarian tumor. DR. SHEPARD, of this city, drew off some fluid for the purpose of making a diagnosis, and her family physician, DR. M. W. DANFORTH, of Cascade, operated once and drew off some fluid. In consideration of these facts I thought it unnecessary to tap her, especially as I did not care to get adhesion at the point of puncture (a procedure I shall never again neglect in any suspected case of ovarian tumor). DR. DANFORTH brought the case to me for operation in May last, and after examining it as above, myself, in company with DRS. DANFORTH and SHEPARD, we concluded to operate immediately, while the patient had pretty fair strength.

Accordingly, upon May 31st, 1882, in the presence, and with the assistance of DRS. DANFORTH, SLIGH, HATHAWAY, BRADY, and MORRISON, I opened the abdomen, making the long incision and in the mesial line. Immediately after cutting through the skin we noticed there was more adipose tissue than is usual in cases of ovarian tumor. Upon getting down to the peritonæum we had some difficulty in picking it up with the forceps to pass a director under it, which we supposed was caused by adhesions, and in cutting through it the knife passed through a second serous membrane at the same time, owing to the two being in close contact. We were at first a littled puzzled by the appearance of the tissue under these membranes, as we thought we could not yet be into the cavity of the abdomen; but the first stroke of the knife into it undeceived us, for the blood gushed forth in a number of streams as large as one's finger, and we knew we had cut into the tissue of a fibroid. The bleeding was simply fearful, and flowed faster than three men could take it up with sponges. It was principally vœnus blood coming from the severed ends of three large veins and was only controlled by ligature.

After the bleeding had ceased, we examined the growth and found it to be a large fibro-cyst of the uterus, involving the whole uterus, and right ovary; the fibro-cyst of the latter was, however, undoubtedly, independent of the uterine fibro-cyst, though they at first appeared to be identical. The growth was quite free from adhesions upon the upper portion at all points except the bladder, to which it was firmly adherent; the under portion was evidently adherent at several points. DR. BRADY passed a sound into the uterus and it then passed to a depth of six and a half inches, instead of two and three-quarter inches, the distance passed before opening the abdomen, and the reason was at once made apparent, for, like DR. EMMET'S case, quoted above, the canal at the distance of about two or three inches made a "sharp curve" to the right, beyond which it was impossible to pass a sound before opening the abdomen, owing to the tumor being held down by the abdominal walls; but its passage was at once made easy upon removing the pressure of the walls upon it; the tumor at once raising up and thus straightening its canal. There was no pedicle at the utero-vaginal juncture, as the fibroid extended clear down, and consequently little or no opportunity to remove the uterus by the method EMMET pursued in his operation: besides, I had his results in my mind and concluded that it would be preferable to sacrifice the brilliant operation of removal of uterus to the chances of my patient's recovery, although it might be a forlorn hope. So after puncturing some of the cysts with a trocar, and mopping out the abdomen as thoroughly as possible, I closed up the wound with eight silver sutures, bringing the ligature of the veins outside; and I can assure the reader that I had to summon more courage to close up that abdomen than I ever did to begin any operation I ever undertook. A drainage tube was inserted into the lower angle of the wound and carried up well into the abdomen, while upon its free end was tied a large sponge moistened with a fifteen-per-cent. carbolic solution. The woman was bandaged and the wound was dressed as is usual after ovariotomy. The subsequent treatment was the same, and in spite of many adverse predictions, the woman made a rapid and excellent recovery, the tem-

perature never rising above 102°, and never as high as that, except for the first three days. There was quite an abundant discharge for the first three weeks, and more or less for six, at the end of which time the drainage tube was removed and the wound was allowed to close up, when it was found that the tumor was reduced in size 50 per cent., owing, I believe, to the thorough drainage, as in my opinion was also the ultimate recovery. The patient is now in good health, and the growth to all appearances stationary, where it may or may not remain; but at all events, she is much better off than a dead woman with her uterus removed, which I feel pretty sure she would have been had I removed that organ.

There are several points of interest in this case bearing upon the question of the diag nosis of ovarian tumors and the removal of the uterus for fibroids. First, it shows that the sound does not indicate the depth of the uterus in every case of fibroid, thus destroying the value of one of the symptoms heretofore looked upon as almost certain in diagnosing fibroid tumors from ovarian. Again, it shows us that hæmorrhage is by no means essential in fibroids or fibro-cysts, for this patient never had hæmorrhage during the whole eight years the tumor was growing, and besides was quite "regular," her menses being normal as to quantity and quality. EMMET says, "the kidneys are never obstructed" by fibrous growths, and yet obstruction of the kidneys was a prominent symptom in this case for weeks before the operation. The infallibility of this symptom must then be questioned.

He also says the peculiar facial expression, so characteristic of ovarian tumor, is "never found with fibrous growths," and yet, in the case just described, the "facies ovariana" was so well marked as to be the first symptom noticed upon going into the room, proving that while this sign may be usually pathognomonic, it is not always so. The case also shows that fluctuation may be present in fibro cyst as well as in ovarian growths, and it was surely well marked, the certain "gelatinous consistency" mentioned by EMMET, together with the fluid in the cysts, perfectly simulating the fluctuation of an ovarian tumor. The simple drawing of fluid from the growth is also delusive, for in this case two reputable physicians, and at different times, drew fluid from this woman's abdomen; just what kind of fluid it was they do not know, as no microscopic examination was made of it, but it teaches that as a symptom it is without value except some of the cells of DRYSDALE are found; and even then it is debatable ground whether the difference can be determined by that or not, but if there is any reliable sign that is the one; though there has been, and is yet, much controversy among ovariotomists upon the subject. In view of the uncertainty of all diagnostic symptoms the only safety for the operator is to candidly state to patient and friends before commencing an operation, the liability of mistaking one condition for the other, no matter how well one is convinced in a given case. As for removing the uterus for fibro-cysts or fibroids, it seems to me that it should only be undertaken as a measure of last resort, and never when the patient is comparatively comfortable, for this case teaches us that the patient's safety does not depend upon the removal of the uterus, even when the abdomen has been opened, and the fibroid cut into; but, on the contrary, it shows that the patient's condition may be benefited by that very operation, and the subsequent drainage, which may reduce the tumor in size until it can be carried without serious discomfort. This would seem to be worth our consideration, when about to remove the uterus from a woman forty-five or fifty years of age, for with the tumor reduced from 40 to 50 per cent. the woman's chances for fifteen or twenty years of comparative comfort, seem to be much better than her chances for life with the uterus removed. I am entirely conscious, while pleading for conservatism in discussing this new and fashionable operation, that there have been a few successes, but there have been many more lamentable failures, even at the hands of the most skilful operators, and when the after-treatment has been most carefully looked after, and the patient's nursing and surroundings have been of the very best. In view of these facts good results must of necessity be quite rare at the hands of the novice or occasional operator; and I cannot agree with a late writer who says, "The ovariotomist should be prepared to take the bold step of removing the uterus, when it is called for by such complications."

The complications he refers to in the above paragraph, are adhesions of the tumor to the uterus; it seems to me the adhesions would need to be very extensive to justify the operator in removing the uterus from a patient who had gone under the influence of ether, understanding that she was simply to undergo an operation in which there are at least 75 per cent. of recoveries, only to awake and find that she had undergone an operation of which there are scarcely 10 per cent. of recoveries. There are desperate cases when even the small chances for life offered by the operation for the removal of the uterus, may be grasped at by the patient, but in my opinion neither ovarian nor fibroid tumors should be numbered among them, and surely not without the full consent of the patient and her friends, after the chances of recovery have been fully and truthfully explained to them.

54 Monroe Street.

MULTIPLE LIPOMA.

BY E. J. KAUFFMANN, M. D.*

A lipome is a tumor composed of normal adipose tissue; is well defined and made up of overgrown fat lobules. They are met with in all parts of the body where adipose tissue is developed. They vary in size and number, sometimes attaining large dimensions. As most usually presented to us they are unmistakable, and most always we find one, two or three.

Occasionally we meet cases where these lipomæ are distributed well over the body and exist in large numbers. Such cases are rare, hence as an illustration and a very peculiar and interesting case, I will mention the following:

HERMAN MEAD presented himself for treatment with the following history: Twenty-one years old, single, American born; was perfectly healthy up to one and a half years ago, having as a child had scarlet fever and measles—at which time he contracted a severe general cold, which was followed by constipation, the bowels moving sometimes only once in two weeks, never oftener than once a week. This state of things continued for three months when, as the result of treatment, the bowels became regular. Then the patient experienced stinging pains in his left leg, from the toe to the hip, worse at night —sufficient to keep him awake; had a short dry cough and complained of shortness of breath. These pains are now present. Shortly after the appearance of the pain the patient noticed small tumors all over the body. Since that time he has emaciated very much, having lost fifty pounds. Has occasional frontal headache, accompanied by a twitching of the eyelids.

The patient strongly denies and shows no evidence of ever having had any venereal disease.

Family history: Father and mother both living, aged respectively 65 and 48 years; healthy. Three brothers all living. One has two lipomes and bad cough; the other two are healthy. One sister, dead; cause, hydrocephalus.

On thorough examination the electrical reaction of the muscles I found to be normal, as for example:

RIGHT SIDE.

Ka SZ.—Tibialis anticus, two millimeters.

Ka SZ.—Extensor communis digitorum, four millimeters.

There is no lesion of the nerve centres, of the nerves, brain or spinal cord. Lungs and heart are normal.

There are twenty-six tumors about the size of a pea.

The interesting and puzzling points of this case are the sudden appearance of the tumors, simultaneous with the pain, and the great emaciation. It is possible that the patient may have overlooked these small nodules, only noticing them when his attention was more carefully directed to his condition, but it is possible, to my mind, that they then first commenced to make their appearance. It seems to me that the question of whether metastasis occurs in tumors which are composed of normal, representative primary tissue, is still, or should be unsettled. We frequently meet tumors essentially of such tissue multiple, fibromas, osteomata, papillomata, adenomata, etc. The last, for instance, we know to be metastatic in some instances, and malignant. VIRCHOW, though strongly inclining to the belief that lipomæ are not metastatic, does not assert so positively. In the face of such cases that at times spring up, we certainly should give that theory a little place.

A very interesting question is, Is there any distinct connection between the lipomæ and the emaciation?

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Correspondence.

The following history of a case which has been under my care, I think may be of interest to some of your readers. The probable, or even possible annoyance from ligatures such as this case illustrates, I have never seen spoken of as a result of antiseptic surgery.

Some three months ago I was called upon to see a MRS. D., who had been suffering for some time from a rapidly growing tumor of the knee. On examination I found a tumor about the size of my two fists attached to the inner condyle of the femur, which, from its appearance and history, I decided was an osteo-sarcoma, and recommended amputation at the middle of the thigh. She was suffering such intense pain, especially at night, that she readily consented, and I accordingly performed this operation about a week later. The operation was performed under the strictest antiseptic precautions, bichloride solution, 1 to 500, being used for all sponges, instruments, etc. One large vein was found to bleed, and was tied with antiseptic silk; the superficial and deep femoral arteries were also tied with silk, while all the other bleeding vessels were secured with carbolized catgut and cut close to the knot. The silk ligatures were drawn out at one angle of the wound, a drainage tube inserted, and the wound closed.

At the first dressing the flaps were found to have healed nearly throughout by first inten-

tion; drainage tube was removed, and no further trouble was anticipated. At the end of a week or ten days, I commenced to "feel" the ligatures, and this I continued to do each day for the next three weeks, when she was seized with a severe chill, and in a short time a very severe erysipelas developed, but by careful treatment this was subdued, and in the course of two weeks she had entirely recovered.

I now again endeavord to pull away the ligatures, but they refused to come. I concluded, therefore, to endeavor to loosen them by putting them on a continuous strain. This I accomplished by attaching each one to a rubber cord, which was passed over a roll of linen and fastened by rubber plaster. This was kept up for two weeks, when she again had a chill, which was immediately followed by a recurrence of the erysipelas, and all efforts were directed to subduing this. After she had recovered from this second attack I determined to remove the ligatures by force, as I considered the channel through which they passed to be the focus of the septic infection. I seized one of the ligatures with a strong forceps, and twisted it very hard, pulling at the same time. This caused considerable pain, but determined that they should come out, I gave it a sharp, quick jerk. But judge of my surprise on examining it, to find that the thread itself had broken off some way in; probably very close to the knot. I repeated this manœuver with each of the other ligatures, and with a like result.

The sinuses caused by the ligatures healed rapidly, and to-day she is perfectly well. I can only account for the ligatures being held so firmly, on the assumption that they had become very firmly encysted during the primary union, or had some organic union with the tissues. No doubt the strength of the silk had been weakened somewhat by its long stay in the tissues, bathed in purulent matter, but a very considerable amount of force was necessary to break it.

I may here add that a dissection and subsequent microscopical examination of the tumor showed it to have been an osteo-sarcoma which had completely destroyed the inner condyle of the femur, and had extended about three inches up the medullary portion of the bone.

DOUGLAS A. JOY, M. D.
MARSHALL, Mich., March 10, 1886.

A SINGULAR UNTOWARD EFFECT OF CHLOROFORM.

Some years ago my wife had a small subperiosteal abscess in the right thumb near the distal extremity of the last phalanx, which had given her a considerable amount of pain for a week or more. While the case was not a well-pronounced so-called felon, it was about as painful. MRS. S. had been in the habit of using chloroform for neuralgia, of facial variety, so that I paid no attention to her handling the drug; so when this abscess required opening, she took the chloroform bottle and began inhaling with one nostril at a time from the bottle, taking a part of a breath from the bottle, then waiting for half a minute or so, then inhaling more chloroform, all the time joking and laughing. I had a curved bistoury in my hand while talking to her and urging her to desist from inhaling the chloroform, but to no purpose until I took the bottle from her and putting the cork in it drew the hand over one knee and putting the other leg across it held it fast and steady. I inserted the knife, when she said, "that hurt just as much as though I had not inhaled any chloroform." I drew out all of the pus, washed the hand and laid her upon a lounge. This was about 11:30 p.m., no one but ourselves being in the house. Immediately upon laying her down she began calling me by my given name, and kept repeating it as fast as she could without any appreciable interval, beginning with voice pitched very high and gradually running down to nearly bass; then her voice gradually died out, when, to all appearances death ensued. I could make out no sign of life in any manner, either of respiration or circulation. As complete rigor mortis came on as I ever witnessed in any corpse, and the surface was as cold and hard as any corpse could be in a house with a good fire. I ran across the street to the nearest neighbor, MRS. T., and beseeched her to come over at once as my wife was dead. On her arrival we decided to call in other ladies. As she was about to call them, however, I was startled by my wife's opening her eyes and saying, "Oh, how cold I am." I called to MRS. T. to come back, and upon her doing so MRS. S. asked of her what she was doing there at that time of the night. MRS. T. made some evasive reply, when MRS. S. remarked that she could not bend her limbs. We took hold of her hands and tried to straighten her arms, but it was with great difficulty that we succeeded, and it was several hours before she was warm and had full use of her limbs. She knew nothing of the intervening time which, I had forgotten to mention, was from 11:30 p.m, to 2:30 a.m.

Can any one give me any reason for such an untoward action of chloroform?

From the date of that experience my wife never recovered her usual spirits. Her complexion became muddy, hair became dry and she lost flesh and continued, without any ascertainable cause, to sink for two years, when death closed the scene.

If any reader has had a like experience or can give me any rational explanation of the case, I would be pleased to hear from him.

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417 S. Clark St., Chicago, Ill.

NOTE ON THE USES OF VIBURNUM PRUNIFOLIUM.

I am much pleased to see that DR. MACFIE CAMPBELL has brought before the profession the value of this drug in the treatment of cases of threatened abortion, and am happy to be able to give additional corroborative testimony.

A note on this subject, by DR. ROE, of Beachville, Ill., in the January number of the Therapeutic Gazette, 1883, first attracted my attention, and since then I have used it in every case occurring in my practice, and with so much success that I now approach the treatment of such cases with far greater confidence than formerly. I have not kept notes, but at least twenty cases have been so treated, and in quite two-thirds the result has been satisfactory, while the failures have always been due to some imprudence on the part of the patient, or other cause beyond the control of the medicine.

Only two days ago I received a most grateful letter from the husband of a patient, saying that his wife had been safely delivered of a healthy child at full term the previous evening. This lady was visiting Sandown, and on August 31st had a serious attempt at abortion, but, thanks to the repeated doses of viburnum, was able to proceed home, a distance of over eighty miles, including several changes and a short sea passage, on September 2d. She had never previously gone beyond the fourth month of pregnancy.

The preparation used has always been the fluid extract prepared by PARKE, DAVIS & CO., one teaspoonful in water every hour until the urgent symptoms subside, and then three times a day until well.

It is always well to order a few doses to be taken about the time when the monthly periods are due in the ordinary course, for at such times these patients appear more than usually liable to abort.

Unfortunately, the remedy has both an unpleasant smell and taste, therefore, if an equally reliable solid extract can be procured, it would be better given in the form of a pill; at the same time it must be borne in mind that the liquid extract is more easily and quickly absorbed.

Another affection which is at times the dread of the patient, and the bug-bear of the medical man, I allude to dysmenorrhœa, is also at times more successfully treated by this remedy than any other.

It is often sufficient to give this alone in doses of one teaspoonful every four hours, commencing before the expected period, and continuing afterwards for two or three months in doses of half a teaspoonful three times a day. When this remedy alone fails, it is advisable to give an equal quantity of the liquid extract of Jamaica dogwood (piscidia erythrina). This combination rarely fails in giving relief.

W. E. GREEN, M.R.C.S. ENG., AND L.S.A.

Belgrave House, Sandown, Isle of Wight, March 1st, 1886.

FEE FOR EXPERT TESTIMONY.

The following ruling of JUDGE C.C. FULLER, Mecosta Co., in the case of the people *vs.* VANIMMENS for the murder of JOHN CROW, is of particular interest to the medical profession:

A physician was called to testify on behalf of the defendant, and when asked for a professional opinion refused to answer until a fee for expert testimony was secured. The judge said he had no authority to secure the fee; the bill must go before the Board of Supervisors. Witness said he had had enough experience with that body to trust them no further. The judge said this question has never been decided in this State. "I can insist," he said, "on the witness answering, and if he then refuse I can fine him for contempt of court, and then let him fight it out with the Supreme Court. But after many years' study and observation, I decide that a physician's knowledge is his stock in trade, his capital, and we have no more right to take it without extra compensation than we have to take provisions from a grocery without pay, to feed the jury. The Court rules that the witness is not *compelled* to testify." The doctor at once stepped off the stand. The defense took exception to the ruling of the Court.

Should a new trial be granted, this will be one of the points to be decided by the Supreme Court, in which case I will refer to this matter again.

F. J. GRONER, M. D.

BIG RAPIDS, MICH., March 11, 1886.

A PECULIAR CONGENITAL OCULAR DEFORMITY.

The subject of this deformity is a lady thirty years old. Has never been married. Is well nourished and well developed, with the exception of an enlarged thyroid gland, for which she is being treated at present. The deformity consists in an oblong outline of the pupil of the left eye; the long diameter of the pupil being from above downward. The pupil has very much the form as seen after the operation of downward iridodesis. The lady is congenitally blind in this eye from causes which I have been unable to detect. There is also present in this eye a moderate degree of diverging strabismus. Deformities of this character are not mentioned by WELLS, NOYES, nor STELLWAG. I am, therefore, led to believe this a rare deformity, and hence have taken the liberty to report the case for publication in the AGE.

J. A. WESSINGER, M. D.

HOWELL, Mich.

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Editorial.

HOPEINE BEFORE THE ACADEMY OF MEDICINE.

At one of the recent sessions of the Academy of Medicine, hopeine, one of the later pharmaceutical novelties, came up for discussion, and some of the statements made regarding it are of such an interesting nature as to induce us to reproduce them:

M. Dujardin-Beaumetz had some time before had his attention called to hopeine, a narcotic principle, said to be extracted from hops. He was disposed to experiment with this remedy, when Mr. Petit called his attention to the fact that the analyses of the preparations furnished by English and American houses showed large quantities of morphine. He had duplicated these analyses with M. Bardet and was qualified to assert that in the crystallized state this medicine, though it has a slight odor of hops, presents in its reactions so marked a resemblance to morphine, that he was led to the conclusion that it is identical with the latter. The only difference which distinguishes the two is that the morphine is sold at 50 centimes per gramme, while the druggist sells the hopeine at three to four francs per gramme.

The discovery of this fact forces us to one of three hypotheses: Either the hopeine gives the same reactions as morphine; that the wild American hops contain morphine; or that, under the name of hopeine, foreign druggists sell morphine aromatized with hops. The last hypothesis is the most likely, and we belive ourselves justified in bringing this fact to the attention of chemists and those interested in medical jurisprudence.

M. Mehu, who took part in the discussion referred to, declared that one decigramme of hopeine is said to require in its preparation, one kilogramme of hops, and he added that these hops must come from Central America, or some other unusual place, because he could not procure the principle from the hops grown in France. The Germans, who have endeavored to obtain it from European hops, have also not been able to do so.

M. Dujardin-Beaumetz, in concluding the discussion, said that it was quite apparent to him that a very interesting report of Williamson, on hopeine, is nothing more nor less than a report on morphine, and that the reporter was the victim of a commercial imposition which cannot be sufficiently condemned. *Sic transit gloria hopeini!*

THE DEATH OF DR. AUSTIN FLINT.

The profession was shocked by the Associated Press dispatches of the morning of the 14th inst., which announced the sudden death of Dr. Austin Flint on the previous day. He had been in his usual good health up to midnight of the 12th inst., when, uttering a cry, he fell unconscious on his bed, in which condition he laid for fourteen hours, or until death closed the scene. Everything which science and loving hearts could do to prevent the fatal issue was, of course, done. The diagnosis was cerebral apoplexy.

Dr. Flint was born in the year 1812, in Petersham, Mass., and came of a family of doctors, his great-grandfather, grandfather and father having been practitioners of medicine, in which vocation each achieved a position of prominence. To speak specially of what Dr. Flint did for American medicine—of the works which he wrote, of hic contributions to periodical literature. of his labors as a didactic and as a clinical teacher—would be a work of supererogation. His name is a household word among English-speaking practitioners wherever found. No man has ever attained to the same heighth as he, among the general practitioners of medicine in this country. No man has done so much for general medicine, and to none will history accord higher praise for honest work in furthering the science and art of medicine in America.

Notes.

A writer in an exchange gives the following account of a consultation: We were about three miles from Natchez, when we heard a great shouting and wailing in a negro's cabin by the roadside, and it was decided to dismount and go in. It was a tumble-down structure with but a single room, and into this were crowded 16 or 18 colored people, mostly of the female sex. On a heap of straw on the clay floor was a sick woman. She was rolling her eyes and writhing as if suffering great pain. When asked what ailed her, an old white-haired negro, who was called "doctor" by the others, replied: "Dat's jist what we doan' agree on. Some says it's de bilyus colic, an' some says it's de gallopin' consumpshun." "Why, man,

something ought to be done for her right away." "Zactly, sah—'zactly, an' Ize de doctah dat would like ter take right hold ob the case." "But why don't you?" "Kase Ize boxed up, sah. I nebber gin the same medicine fur gallopin' consumpshun dat I do for bilyus colic, an' until we kin decide on de ailment I doan' dare go ahead." We were on our horses and ready to move off when the old man came out with a happier look on his face and said: "Gem'len, we has sorter took a vote on it, an' we has declared it rheumatism by one majority. Ize gwine right at it to heat de bricks an' gin her an all-night sweat."

Another national medical association is on the *tapis*. The American Medical Association is too large, and is too open to the *hoi polloi*, as it were, in the opinion of certain of the salt of the profession of this country, to wit, a coterie of self-constituted leaders, who reside, of course, in Boston, New York and Philadelphia. These wise men of the east have, therefore, deemed it necessary, in order that the light of American medicine should not be wholly extinguished, that a new association, composed only of a select one hundred, should be organized. It seems from this that the American Academy of Medicine, composed of the A.M., M.D.'s has not turned out to be all that it promised. Well, we do not suppose that the profession will worry itself much over this new association. It will please this coterie of remarkable men to meet together annually, to mutually admire themselves, and it won't hurt the common herd to have them do so. They will hold their first meeting in Washington on June 16th and 17th next, and if you don't receive one of the printed invitations which are out, you may conclude that you are not one of the hundred eminent physicians of this country, and are not expected to attend this meeting, over which one FRANCES DELAFIELD, of Boston, will preside.

DR. ERICHSEN'S very valuable paper in our last is calculated to direct renewed attention to cremation as a substitute for inhumation. The overcoming of the prejudice against this new, or, rather, old, method of disposing of "this worthless tenement, whose undying guest has gone forever," is only a question of time and education. We may not live to see the day when burning will have supplanted burial, but doubtless, our grand-children will think it neither sacrilegious nor cruel to reduce to ashes the remains of our children. The arguments in favor of this method have been forcibly stated, and it but remains for them to take root in the soil into which they have fallen—a soil which will become more and more fruitful as it is subjected to the influence of an advancing science.

A Texan patient who told his physician that he had great difficulty in breathing with his lungs, was consoled by the assertion that he would, probably, have a great deal more difficulty in breathing without his lungs. This joke from Texas reminds us of one told at the expense of one of our Detroit doctors, whose well-earned reputation in the treatment of throat and lung affections, brought to him a patient from Dallas, Texas. After a careful examination of the case, the doctor discovered changes for which he advised a change of climate. "And where would you advise me to go, doctor?" "Well, sir," replied the doctor, "the best climate for a person whose lungs are in the condition in which I find yours, is that of Texas."

One of the questions asked by a life-insurance company for which the editor of the Southern California Practitioner examines, is, "Have you ever been intoxicated?" In reply a recent applicant said, "I was born on the 4th of July; this country was born on the 4th of July; and I was with Grant when Vicksburg capitulated on the 4th of July." The doctor did not see how a human being could pass this triple anniversary and give a negative answer to the question, and he wrote down "yes." We examined a sailor the other day, and in reply to the question, "Have you ever had any disease of the abdominal or urinary organs?" he stated that he had sailed these lakes, between Chicago and Buffalo, for twenty years, and spent about a week at each port on each trip.

DR. BRODIE, President of the American Medical Association, has been writing letters to the Canadian Medical Journals anent the International Medical Congress controversy. He patriotically stands up for the profession on this side the Atlantic, and says, "When the medical savants of Europe come to Washington they will be surprised at the scientific papers presented, and discussion had upon their own papers." The Medical Record quite agrees with the eminent correspondent. Doubtless, the savants will come properly prepared for surprises, although we do not know why they should be surprised at anything good coming from an American doctor.

The genial sun is beginning to throw his rays more perpendicularly on this frozen portion of the earth, the icy grasp in which old winter held the fountains and the rills, is being unlocked, and floods and freshets will soon abound. This is a more or less beautiful thought, and might be beautifully elaborated in connection with the co-incident unlocking of the doors of the medical schools in which countless sad-faced and hollow-eyed youths have been for months, or weeks, as the case may be, immured. We do not propose to do

the elaborating, and merely drop the hint for the benefit of the valedictorians whose strident notes will soon rend the air.

The Cincinnati Lancet and Clinic reproduces the following veracious account of the decease of the late DR. ÆSCULAPIUS: "ÆSCULAPIUS the first was a remarkable practitioner, and came near ruining the early practice of physic. He not only cured the sick, but actually brought the dead to life; among others, HIPPOLITE son of THESEUS. Frightened at such remarkable skill, and seeing that Hell would soon be depopulated if ÆSCULAPIUS the first lived, PLUTO in despair employed the aid of JUPITER, who hurled a thunderbolt at DR. ÆSCULAPIUS, and as the latter was not protected by a lightning rod he was over electrified and fell dead."

Truth is truth, and as such knows no degree or variety. It is, however, modified by the medium of its conveyance, and as it comes to us through various media, it is apt to appear in various forms. A philosopher formulated this idea thus: "Thus SMITH seeks after truth, but unconsciously presents his own version, just as iron remains the genuine substance, but in a varied form. To this may be added the old axiom: "There is nothing more misleading than figures, except facts," which may be interpreted in the same manner.

The Medical and Surgical Reporter gives the following; it has a moral hidden between its lines: "My poor man, said the doctor, "you are dangerously ill. Is there any word you want to send to your friends?" "Am I really so ill?" asked the sufferer. "Alas, I can offer you no hope." "Very well, then," said the sick man to his nurse, "telephone for another doctor." Few patients are content to continue with a doctor who cannot give hope.

The Indiana Medical Journal tells of a well-informed medical student who wished to parade his knowledge before his sweetheart, who complained to him of a sore throat. Asking for a spoon, he depressed her tongue, and after gazing learnedly for a time into the yawning chasm, he gravely informed the young lady that her vulva was greatly elongated.

The news now comes from Paris, that PASTEUR believes he can prevent or cure diphtheria through a process of inoculation. Perhaps he can, and when he demonstrates the fact he will have solved the much-mooted question of the local or the constitutional origin of the disease.

DR. PURDY, of New York, was fined $500 for reporting a case of small-pox, and now DR. DENNLER, of Long Island, has been indicted for *not* reporting a case of small pox. Those easterners seem rather hard to please. Detroit doctors solve the question by denying the correctness of the diagnosis.

An old item published in 1774 says: "Man is engendered in bed, and there begets other men; he is born in bed, sleeps in bed, wakes in bed, dreams, meditates, enjoys divine pleasure, suffers mental and physical agonies in bed, and dies in bed."

"Death from exposure" was the verdict recently rendered by a Montana coroner's jury, who sat on the remains of a man who had been found hanging where the vigilantes left him.

Book Notices.

A MANUAL OF OPERATIVE SURGERY. By Lewis A. Stimson, B. A., M. D., Surgeon to the Presbyterian and Bellevue Hospitals. Professor of Clinical Surgery in the Medical Faculty of the University of the City of New York, etc. Second Edition. With three hundred and forty-two illustrations.

Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

We know of no work which so concisely and so explicitly, withal, gives the methods of performing the various operations known to surgery. It covers such a large field in such a small space, because of the fact that it goes on the presumption that its reader is a man of ordinary intelligence and mechanical ingenuity. It, thus, does not find it necessary to enter into that minuteness of detail which is so tedious to the ordinary practitioner, and which is apt to form so large a part of the works which essay to cover the same field. Touching this matter, the author quotes, with his approval, SYME'S characterization of these minutiæ: "The fiddle-faddle instructions, not only for using, but even for holding the knife, which sufficiently denote the poverty of intellect whence they proceed, and the lowness in aspiration to which they are addressed."

The illustrations, of which there are 342, are executed in faultless style, and, while many of them are reproductions from other works, they are all excellent. The work is an almost necessary supplement to the larger and more systematic treatises on surgery.

A SYSTEM OF PRACTICAL MEDICINE. By American Authors. Edited by William Pepper, M. D., LL. D., Provost and Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania; Assisted by Louis Starr, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Volume IV. Diseases of the Genito-Urinary and Cutaneous Systems.—Medical Ophthalmology and Otology.

Philadelphia: Lea Brothers & Co.

The contributors to this volume of this great

American work, embrace names, most of which have a national reputation, and represent the eastern, western, northern and southern sections of the country—representative, therefore, in the various senses of the term. We have, in noticing the preceding volumes, given an outline of the scope of the work, and find it scarcely necessary again to do so. An exhaustive review would, in any event, be impracticable. We notice a chapter on Diseases of the Vagina and Vulva, by our towsman, DR. E. W. JENKS, who is well and favorably known, particularly to the profession of the north-west. The subject is treated with the doctor's characteristic thoroughness and attention to detail, and the chapter is one of the most profitable and interesting in the book.

The volume, as a whole, is above criticism, but there is one feature of it which strikes us as being somewhat inconsistent, and that is the abundant reference to foreign authors. In a work announced as distinctively American, one naturally looks for the product of American brain, and it is somewhat disappointing to find this product so freely diluted with borrowed matter from across the seas. Is there not enough to be gleaned from American practice to make a work of this size? If not, then, we believe, the profession would be better pleased to have a smaller work, purely American.

DISINFECTION, Including Personal Prophylaxis Against Infectious and Contagious Diseases. By Andrew J. B. Jenner, M. D, Member of the American Public Health Association, etc.

Detroit: John F. Eby & Co.

This is a little book, of upwards of a hundred pages, designed, we should infer, chiefly for the instruction of the public in the best methods of preventing the affections in the absence of which the physician's occupation, like that of OTHELLO, would be gone. In a spirit of self-sacrifice of which no other profession furnishes a duplicate, the physician writes, and commends the reading of, just such books, and endeavors, by word and by pen, to inculcate the necessity of obedience to their precepts. DR. JENNER has given us a very readable little work on its subject. He has a manner of stating wholesome truths which sends them right home, and which must make his effort to serve the public in this particular direction, very popular. He is a cremationist of pronounced positiveness, and finds both in science and in religion abundant argument in support of this means of disposing of the dead. His chapter on vaccination is a good piece of reading. As ought properly to be expected of a lineal descendant, bearing the name of the immortal discoverer of vaccination, he is an enthusiastic champion of this prophylactic means against small-pox. We hope the doctor may succeed in impressing the public with a proper sense of the value of his book. In that case his pecuniary reward must be satisfactory, while the good which will accrue to the purchaser will be incalculable.

FRACTURES AND DISLOCATIONS. By T Pickering Pick, F. R. C. S., Surgeon to, and Lecturer on Surgery at St. George's Hospital; Member of the Court of Examiners, Royal College of Surgeons of England. Illustrated with 93 Engravings.

Philadelphia: Lea Brothers & Co.

This is a manual of 524 duodecimo pages, treating in terms necessarily concise, of a very important practical subject, and one in connection with which the great bulk of the suits for malpractice against physicians, are brought. A permanent deformity after the treatment of a fracture or a dislocation is a something which appeals very directly to the sympathies of a jury and the defendant in a malpractice suit who is not mulcted in a manner which is apt to curdle his milk of human kindness, must have his cause unusually just. A careful study of the little work before us will do very much to prevent the occurrence of these damaging eye-sores, and when they cannot be prevented the book will furnish arguments which will be found of great value to the lawyer for the defense when he enters upon the cross-examination. The book will abundantly repay a careful study, and it, or one very much like it, should be a close companion of the general practitioner especially.

THE YEAR-BOOK OF TREATMENT FOR 1885. A Critical Review for Practitioners of Medicine and Surgery.

Philadelphia: LEA BROTHERS & Co.
Detroit; PHILLIPS & HUNT.

This book contains an epitome of the more important articles which appeared in the medical periodicals of Europe and America during the past year. The selections have been made by gentlemen who are prominent in the various departments to which they have contributed their reviews. It is clearly impracticable for a single medical journal to lay before its readers even the briefest synopsis of all that is transpiring, and no physician can read, even did he subscribe for, all the journals whose perusal would be necessary to keep fully abreast of the times. The necessity of a work like this year-book thus becomes clearly apparent. This book should have an enormous sale, for certainly no practitioner who aims to keep posted on the progress of his profession will fail to possess himself of it. It is an exceedingly meaty volume, and quite indispensable to the live practitioner.

A MANUAL OF AUSCULTATION AND PERCUSSION, Embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M. D., LL. D., Professor of the Principles and Practice of Medicine, and of Clinical Medicine in the Bellevue Hospital Medical

College, etc. Fourth Edition. Thoroughly Revised and Enlarged. Illustrated with fourteen wood-cuts.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

It is not necessary in noticing this classic work, to do more than to announce the appearance of a new edition. The work has established its place as, probably, the best on its subject now before the profession.

Medical Progress.

PYRIDINE IN THE TREATMENT OF ASTHMA.* —It was at the instigation of my colleague, DR. J. C. WILSON, that MR. LOUIS GENOIS, pharmacist, 1410 Walnut street, first procured this drug, and to him I am indebted for its use. Pyridine has been known in chemistry for some time, ETARDE and CAHOURS having discovered a pyridic nucleus in nicotine in 1880. Its use in medicine, however, is novel, as the first mention of it was made in a paper read by GERMAIN SEE before the Academy of Sciences last June. He had remarked so frequently the benefit derived from empiric and secret formulæ, to which he was so often forced to resort, that he endeavored to ascertain the true physiological agent to which these results could be traced. Together with BOCHEFONTAINE, he instituted a chemical analysis, showing that their action was due to a uniform base developed by the combustion of certain plants and alkaloids, as, for example, chinonine, pilocarpine, atropine, nicotine, and morphine. It has also been found by WOHL and EULENBERG (Bulletin gén. de thérapeutique médicale, chirurgicale, et obstétricale, June 30, 1885) in the condensed products of tobacco smoke, and during the destructive distillation of dry organic matter in the products of bony tissue and coal tar.

The name pyridine is derived from the Greek word πῦρ (pyr), meaning fire, indicative of its source of preparation; when pure, it is a clear, colorless liquid, with a specific gravity of 96, boiling at 274° F., inflammable, having a strong penetrating odor, evaporating in the air at ordinary temperatures, and miscible with water in all proportions. Its chemical formula is C_5H_5N, being that of a base belonging to a series of bases of which picoline (C_6H_7N) and lutidine (C_7H_9N) are the most important, being analogous to the aniline bases, and it forms salts with the mineral acids, which are very soluble but easily disintegrated; the latter constitutes one of its difficulties in administration. SEE'S† experiments show that the sensibility of the pneumogastric nerve and the excitability of the medulla oblongata are decidedly diminished in the dog. "The blood-pressure, which is 14° ctm. of mercury in the normal state, rises to 32° ctm. upon central excitation of the pneumogastric, severed in the neck. After the injection of one gramme of pyridic nitrate, practiced twenty times, the arterial tension gradually fell, and, if centripetal excitation was repeated, the pressure remained unchanged—that is, the gray substance of the spinal cord had lost its reflex power."

Physiological experience at first would indicate a similarity to the action of nicotine—contraction of the pupils, dyspnœa, convulsions and death; this I have not found as yet to be the case. Owing to my inability to procure a proper combination for internal use, I have been compelled, in administering it to the lower animals, to use it in the form of vapor, and the observations are not sufficient to warrant positive conclusions; but I would express the opinion that in the healthy animal the respirations are at first quickened, then slowed, the pupils are but little affected, there are no convulsions or dyspnœa at any time, but drowsiness and stupor. The respirations become slower and slower until they cease. After death the heart continues to beat for a considerable period, the cavities containing black, fluid blood.

The method of administration is by inhalation, as it cannot be given by the mouth or subcutaneously, owing to its excessive irritative action in the first place, and to the instability of its salts in the second. The direct application of the drug to the nose or mouth provokes nervous troubles, as well as irritates the mucous membrane.

I have suggested the use of capsules, but its volatility prevents the closure of those made of glass, and its permanence in those made of gelatin. I think that proper combinations may be made to be inhaled directly from a bottle or towel. I have used from two to four grammes at a sitting, poured upon a saucer, placed in one end of a small room with doors and windows closed, or, what is better still, a large closet, and allow the patient, sitting a little distance from it, to inhale the pyridic vapors mixed with the air. The absorption is immediate, the drug being detected in the urine in a few moments.

Upon the healthy adult, as shown in myself, assistants, and nurses, there has been almost universally a flushing of the face, with quickening of the pulse and respiration, the latter lasting but a few moments, the former from fifteen minutes to ten hours, depending largely upon the length of time of inhalation. In several instances temporal headache of a slight character has persisted for several hours; at times a peculiar, full sensation, approaching giddiness, is experienced.

The fact that in the healthy the pulse and respiration are quickened for a few minutes, does not hold good in asthmatic patients, for, almost without exception, the heart's action, which previously may have been accelerated, slowly falls to the normal, without change in character or rhythm; and less rapidly the respirations, which become slower, easier, and more full, the intense longing for air disappearing, with diminution of the oppression.

In most cases there is a desire to sleep, which in some becomes irresistible; this resembles, however, normal sleep, from which they are easily aroused, and without insensibility or loss of intelligence, thus distinguishing it from the sleep produced by narcotics and anæsthetics, although there is a slight loss of muscular reflex action.

*Read before the Philadelphia County Medical Society, January 27, 1886, by Joseph S. Neff, A.M., M.D., Philadelphia, Attending Physician to the Philadelphia Hospital and to the Jefferson Medical College Hospital, etc.

†Bulletin générale de thèrapeutique, June, 1885.

I have used this preparation many times in a series of twelve cases of asthma.

Dr. Neff here gives the history of four cases, which we omit. He then continues:

These few cases will serve as an illustration of the twelve that fell under my observation. Four were in females, eight in males; the ages ranged from twenty-six to sixty-five, divided as follows:

Nervous pulmonary asthma, 3. No return of attacks in any.

Cardiac asthma, 3. All were relieved of attacks. One remained under observation three months, and one for two weeks only.

Bronchial asthma, 3. In one there was no return during ten weeks' stay in the hospital. The two others were relieved of their attacks and insisted upon their discharge, being under treatment less than three weeks.

Asthma in advanced phthisis, 2. In one there was but slight relief during the paroxysm; in the other there was absolutely no benefit.

Asthma as a complication of gout, 1. No return in a month. Albuminuria from interstitial nephritis was present.

Of the fourteen cases reported by See, four were in females, ten in males, from thirty to sixty-eight years of age. Nine were what he terms "pure asthma," all of which were more or less relieved, and five cases of cardiac asthma.

In one case of twelve years' duration pyridine caused nausea and vertigo after eight days of treatment, which necessitated its discontinuance, although great relief was obtained. Nausea I have not seen; vertigo but once.

In one or two cases where the expectoration had been purulent it lost that character after the inhalation.

All unpleasant symptoms seem to be confined to cases with long-standing emphysema, or valvular or degenerated heart disease, with small, irregular pulse. In young, robust people with "simple" pulmonary asthma there seems to be drowsiness alone.

Since these observations* were made I have noted, in a more recent report by Lublinski,† one case of marked tremor of the limbs with nausea, and another with vomiting, dizziness, and severe headache. In all of these, however, the length of time of each inhalation was prolonged from one to one and a half hour.

The beneficial results obtained from this remedy seem to be from its action on the sympathetic and the medulla.

Any depressing effects on the heart noted in Case IV would seem due rather to the interference with the pulmonary functions, death being caused, in the lower animals at least, by paralysis of the respiratory centres.

Pyridine is not to be classed as a curative agent. Most likely its greatest value will be seen in cases of simple or nervous pulmonary asthma, when the iodine preparations can not be borne, or nitro-glycerin and sodium nitrite are contraindicated. Although in the bronchial or catarrhal forms of the disease the relief of the paroxysms has been marked in ninety per cent. of the cases treated, of the remaining number nearly all had emphysema of long standing.

In asthma occurring in advanced phthisis the drug should be given with care, on account of the small amount of lung tissue left unaffected, especially where there is a great degree of consolidation with fibroid induration, as in Case IV, when, perchance, the spasm may be relieved, but few air vesicles remain in condition to respond. Here at least morphine will hardly be superseded.

I have used pyridine in several forms of dyspnœa occurring in different diseases without much benefit.

In phthisis the recurring dyspnœa and orthopnœa are relieved during the period of inhalation only, returning in a few moments, and at times with increased violence.

With so little experience, this drug must be administered with a certain degree of caution until its action is thoroughly understood, severe or persistent headache, nausea, vomiting, and vertigo acting as danger signals, warning us to proceed with care.—*New York Med. Journal.*

*Report of a clinical lecture delivered November 11th at the Philadelphia Hospital. Medical and Surgical Reporter, Dec. 5, 1885.

†Deutsche Medizinal-Zeitung, Berlin, Nov. 5, 1885.

Ergot in Neuroses.—On two former occasions I called the attention of the profession, in these columns, to the use of ergot in nervous and basilar headaches. As my experience with the remedy increases, I am led to the firm conviction that the therapeutics of ergot is as yet almost a sealed book to the profession. Up to a decade ago, we hardly or never saw it recommended in our books, or heard it taught in the lecture-room only as a parturient. I might add that up to that time every old grandma, every country mid wife, and almost every girl of adult age, knew about the use of "smut rye tea" and its application and use in the lying-in room, as much as did the wisest of our profession. This remedy is among the longest known to medical men of the remedies in the materia medica, and to-day I believe that its therapeutic application to varied diseased conditions is the least known of all our older remedies. For the last five years I have made a special study of the use of ergot. I acknowledge that I have experimented with it on the living human subject; given it when I did not know what the result would be, and awaited its action; used it empirically, if you please. Let me say here, that there are many, very many, useless and inert preparations of this drug on the market to-day. I I have tried very many, if not all, of the fluid extracts of ergot that are made. Some I find inert—don't know why; others I find will generally nauseate and frequently vomit the stoutest stomach; notably so, Squibb's. The preparation which I use now, and which I find to be just so every time, which does not nauseate, which I can inject without fear of abscess, and which I am absolutely positive will produce the desired effect without any untoward symptom, is what is known as the "normal liquid ergot," as made by Parke, Davis & Co., Detroit, Mich.

Case 1.—W. K., æt. 8 years, had partial paralysis of lower limbs; in trying to walk, he would stagger, reel, and fall down, just like a drunken man. At same time it was noticed that his sight was gradually failing, and he complained of pain in back part of the eye-balls; this condition continued until he could not bear the light, and he kept himself in the dark. No other complaint was made of the eyes, no redness,

everything apparently was perfectly normal, except as above indicated. Appetite good; all the functions of the body, so far as I could detect, were normal. He had been treated about three and one-half months and gradually grew worse, when I was called, November 30, 1885. The family were poor, and the surroundings were the most unfavorable for a favorable prognosis. I prescribed fifteen drops of normal liquid ergot (P., D. & Co.), in a little syrup tolu, three times a day, the last dose at bedtime, and directed the parents to apply cold cloths to the eyes *pro re nata*. Empirically? Yes.

I heard and saw nothing more of the patient until one day, just two weeks aftewards, the parents and the child came walking into my office, with a smile of satisfaction and thankfulfulness on their faces, which amply paid me, if I never get anything else. The child could walk nearly as well as ever; his sight was perfect, but a little weak, perhaps, in a bright light, and "everything was lovely." I told them to let well enough alone and go on with the treatment. The boy is now well and going to school every day. The treatment was continued about thirty days in all.

Case 2.—Mr. A. H. B., farmer, aged about thirty-eight years. Always been healthy until about ten years ago, when he had an attack of spasmodic asthma, in the fall of the year. Since then, every fall or early winter (too late for hay fever), he has had just such an attack, that would last for a week or more, according to the treatment received. These attacks grew worse and longer in duration every year. This last November and December the attack had continued for five weeks, and every evening the spasm seemed worse; his attending physician, as he told me, had done all that he knew how to do; had rung the changes on anti-spasmodics, nerve tonics, anti-periodics, etc. The case grew worse; became so desperate, in fact, that for an hour at a time he would stand in the open outside door, thermometer several degrees below zero, to get his breath, his wife and hired girl fanning him there all the time. At this stage of the trouble I was called to see him, which was December 31st last.

Looking upon spasmodic asthma as a neurosis, and being, perhaps, a little "cranky" on the use of ergot in nerve troubles, I gave him, at 2.30 p. m., one drachm normal liquid ergot. (I should have said that generally during the day-time his breathing was easier.) I told the wife to repeat the dose at any time during the evening, if any sign of returning spasm, and left a placebo of syrup of squills to be given every two or three hours. There has been no occasion to repeat the ergot; that night his chair was tipped back almost to a horizontal, and he rested well all night; next night he took off his clothes and went to bed, and never slept sweeter in his life. In two or three days more he went about his farm work as well as ever, and remains so. Was or was not this case and its treatment empirical? If the ergot did not relieve him, what did?

Another case. Chorea in a child twenty months old; been afflicted from birth, and was gradually growing worse. Had worn out the bromides and valerianates. I was called, and found the child perfectly well in other respects to all appearances, hearty, functions all normal; put her on normal liquid ergot, three drops four times a day in syrup tolu; gradually increased the dose to five drops. Choreic symptoms gradually vanished. This was three months ago, and very slight traces of the trouble now exist. The patient is now taking an occasional dose of the ergot, sometimes once a day, oftener once in two days. I feel assured that an ultimate perfect recovery will result.

I could recite many more cases of the various forms of neuroses, where I have used this remedy with great success. In whooping cough, hiccough, many forms of neuralgia sciatica, and general nervous exhaustion as seen every day in our American women, ergot combined with some form of tonic is a marvelously good remedy. How it acts, wiser heads than mine must tell; but that it does all these things, and that in a manner most acceptable to patient and physician, this head does know from practical experience. Brethren of the profession, what do you know about ergot?—Elmore Palmer, M. D., in *Phil. Med. World.*

Note on Viburnum Prunifolium in Abortion.—By W. Macfie Campbell, M. D., Liverpool.—Since the publication of Dr. Wilson's paper in the Liverpool Medico-Chirurgical Journal of January, 1885, I have had the opportunity of testing the use of viburnum prunifolium, so much vaunted in America, in several cases of threatened miscarriage, and I can entirely endorse the good opinion he has formed of it. Nothing, probably, in midwifery, is more disappointing than the ordinary routine treatment of miscarriage by opium or Indian hemp on the one hand, or ergot on the other. For these drugs as often act in the way contrary to the prescriber's intention as in accordance with it. How often has a dose of Battley's solution, administered to arrest uterine action, and give rest and ease from pain, been followed by immediate and severe expulsive pains, while the attempt to empty the uterus by a dose of ergot has resulted in a perfect calm, and a disappearance of symptoms.

It is a comfort thus to have some hope of success in dealing with such a condition as miscarriage; and although I have so far only the notes of six cases, of which five were successful, yet, these five being consecutive, and the effect exactly following the administration of the remedy, I have no hesitation in my own mind in giving the credit to the viburnum. The case of failure was my first.

Case I.—Mrs. B., two months pregnant, had discharge of blood, with uterine action. She was treated in the usual manner, with opium and rest for two days, when extract of viburnum, in two-grain doses, three times a day was ordered. There seemed no effect upon the pains, the os continued to dilate, and the uterus was soon empty. Perhaps the dose was too small;* at any rate, I had lost two days, which I take to be the reason of the failure.

Case II.—Mrs. H., pregnant for the seventh time, two months and a half, was awakened by a gush of water early one morning, followed by a bloody discharge. On examination, the os

* In repeated large doses it is apt to give rise to headache.

was soft and dilatable. She was kept in bed, and given at once three grains of extract of viburnum every four hours. There was no return of bright blood, and the discharge gradually ceased. The relief to the pain after the first dose was in this case very marked.

Case III.—Mrs. B., in her sixth pregnancy, one night during the fifth month was wakened by the "breaking of the waters," the escape being sufficient to saturate her night-dress and bedclothes. This was followed by pains. I saw her in the early forenoon, and gave three grains of the extract three times a day, and there were no further symptoms.

Mrs. G., in the fifth month of her second pregnancy, had a bloody discharge, with uterine pains. The same dose was used, and the same good result.

Case V.—Mrs. W., in the second month of her sixth pregnancy; had already had two mismiscarriages. Two grains of extract of viburnum, three times a day, gave relief, as also a month afterwards, when the same threatening symptoms appeared.

Case VI.—Mrs. S., first pregnancy, fourth month. This case was peculiarly interesting from the fact that miscarriage had been imminent in her case at each monthly period. The first and second attacks occurred in America, when she was given viburnum, and her medical man provided her with a large store of the liquid extract, which he told her was unknown in England. She had an attack at sea, and in due time in Liverpool, and was pleased to discover that the drug could be taken in pill, and was equally efficacious, as the liquid extract is very nauseous. While I was from home she had another attack, in which she was attended by Dr. Westby, who considers she was only saved from miscarriage by the viburnum. During this last attack, she took her pills five and six times a day; in fact, her faith was such that she would have taken too many. Bromide of potassium was also given to allay her nervous excitement.

Two other cases turned up during my absence, both of which completed their miscarriage; and I cannot help feeling that, if they had been treated with viburnum, the result would have been different. One sent for Dr. Westby on the third day; the other was treated by another doctor with opium and morphine hypodermically.

It does not do to build too much upon the result of these few cases; but I have been so constantly foiled in my endeavors heretofore to prevent miscarriage, that I hope to have found in viburnum the sure arrest of uterine action, which we certainly at present do not possess.—*British Med. Journal.*

Therapeutics of Infantile Paralysis.—The treatment of essential paralysis in childhood is too often disappointing and unsatisfactory—disappointing the parents because, on account of the abrupt onset, they are not prepared to appreciate fully the gravity of the disease, and unsatisfactory to the medical attendant, who may find that in spite of his efforts an interesting and attractive child has become the subject of a terrible deformity and is possibly crippled for life. Routine treatment in such cases, too, is usually insufficient, and children are allowed to grow up with withered, shortened limbs, dangling joints, and consequent disfigurement. A plan of treatment, therefore, which was formulated by Dr. William Murrell, in a lecture delivered upon this subject at the Westminister Hospital,* deserves serious consideration, since it is based upon an experience extending over six years, during which period notes were taken of 56 cases of this disease, and in every instance in which the treatment was carried out actively and systematically the lecturer declared that "the best possible results were obtained." This expression is qualified because of the fact that most of them were not acute cases, and that some, at least, were of many years' standing, and clearly unfavorable for treatment.

The method pursued is, in brief, during the first or febrile stage, rest, aperients (Friedrichshall water is excellent for this purpose), milk diet (peptonized if necessary), with small doses of tincture of aconite (one-fourth of a minim) given every hour until three doses are taken, and every alternate hour for three more doses, then repeat every three or four hours until the temperature is normal. Convulsions, if present, may require bromides by stomach or rectum. In the second stage, the child is to be allowed to get up, and have a liberal diet. Small blisters or tincture of iodine should be applied to the spine, and physostigma given in granules (of $\frac{1}{50}$ of a grain of the extract), beginning with one three times a day, and increasing gradually until one is taken every three hours.

This should be kept up persistently for many months; but after the first six weeks it may be combined with small doses of phoshorus ($\frac{1}{200}$ of a grain or less). As soon as the acute symptoms have subsided—that is to say, at the end of three or four days from the onset of the attack—massage should be commenced and carried on systematically by an experienced and expert hand. Special stress is laid upon this point, for upon the skill of the *masseur* or *masseuse* will depend to a large extent the success of the treatment. It is to be applied not only to the spine and back, but also to the paralyzed limbs. The methods found most applicable are *effleurage*, *friction*, *pétrissaye*, and *tapotement*. The number of sittings should vary from one to five daily, not too prolonged: these must be kept up for at least six weeks, and they may be required to extend to six months or more, with occasional intermissions. Galvanism to the spine and either the galvanic or faradic current to the muscles (applied to the motor points) is a valuable accessory; and likewise baths of seawater, or pine-baths. Cod-liver oil, extract of malt, and syrup of the phosphates, or of the hypophosphites, are also capable of rendering valuable assistance in the treatment; while the personal hygiene (especially clothing the child in flannel) is of great importance. Hot sandbags placed in bed on each side of the affected limbs are useful at night.

We have directed attention to this treatment because it is based upon sound principles, and it has been subjected to the test of experience by an able observer, who assures us that it deserves a trial by the profession.—*Med. Times.*

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* Lancet, December 16, 1885, page 1177.

THE TREATMENT OF CHRONIC GONORRHŒA WITH CANNELLATED SOUNDS.—DR. LEOPOLD CASPER, of Berlin, states that he has succeeded in curing 30 cases of chronic gonorrhœa with the "cannellated sound." Fourteen of these had already been treated for over a year and a half, and six for over a year by various other measures. Despite the assurances of some specialists to the contrary, there is often nothing more difficult to cure than a long-standing case of gonorrhœa. The use of sounds and urethotomes, of deep injections and cauterizations, of salves and medicated bougies, will all fail at times, while the patient is liable to become the prey of quacks or to relapse into hypochondriasis.

DR. CASPER starts out with about the same confidence in his new cure which is expressed by all who devise a new therapeutic measure for the relief of urethral and sexual difficulties. There is something in the nature of this department of medicine which makes its therapeutics untrustworthy, and we are very much disposed to distrust the assertions of DR. CASPER. In the first place, it is the general experience of those who make a specialty of treating mucous membranes, in whatever part of the body, that medicated cerates, ointments, etc., are not very efficient agents. Despite much pushing, the use of soluble bougies, for example, in the treatment of vaginal, uterine, urethral, and nasal troubles, has not attained any great foothold. It is true, however, that the aplication by sound of Unna's salve in chronic gonorrhœa has been occasionally effective, and CASPER'S method is rational in that it combines the use of mechanical pressure and chemical action upon the diseased part. His cannellated sounds are of the ordinary shape, with six grooves, one and a half millimetre deep, running from the handle to within five centimetres of the point. These grooves are filled with a mass which is solid at the temperature of the room, but melts at the temperature of the body. The formula given is as follows:

℞	Olei theobrom.....	100.0
	Ceræ. flav.....	2.0–5.0
	Argenti nitrat.....	1.0
	Balsam. Peruvian....	2.2.

In the beginning a three per cent. resorcin ointment is sometimes used, but the silver is believed to be better in obstinate cases. The sounds used are of "neusilber," and no chemical action occurs through the presence of the nitrate.

If the patient has a stricture of small calibre it is dilated with bougies up to No. 18 Charrière, and then the canellated sounds are used, increasing their size up to No. 23. The sound should be allowed to remain in the urethra for from a few minutes to half an hour, the longer the better, provided it is not too painful to the patient. An average of about ten applications was found necessary to cure the cases.

DR CASPER considers it important to locate the gonorrhœa, and gives some indications for diagnosticating between an anterior and a posterior gonorrhœa. Most of his cases were situat the junction of the bulbous and membranous parts of the urethra. Of 100 callous strictures 70 were in this location, 20 in the fossa navicularis, and 10 in the remaining portion of the pars spongiosa. When the disease is limited it is not necessary to fill up the grooves of the sound their whole length with the medicated ointment.—*N. Y. Medical Record.*

THE GALVANO-CAUTERY IN DIPHTHERIA.—As startlingly severe as this means of therapy may seem, it yet has been tried by one or two bold physicians on the Continent, and, as was to be expected, they are enthusiastic in its favor. It appears to have been used nearly 30 years ago, but we can easily fancy that in spite of reported cures it was not tolerated and speedily fell to disuse. Nor do we believe that it will ever become, with parents at least, a popular remedy in the treatment of our most popular foe, diphtheria. They will look upon it just as they would regard the actual cautery —as a "red-hot iron"—much as they now regard tracheotomy, as "cutting the child's throat."

The only definite information concerning this measure is by TEDESCHI, of Trieste, and BLOEBAUM, of Coblenz. The latter had used this agent in similar pathological conditions in ophthalmological practice. He assured himself that the galvano-cautery (the wire loop) does not produce inflammation, but is an antiseptic, leaving the necrosed parts harmless and powerfully stimulating the underlying tissues to healthy growth. He regards it as the only true and certain parasiticide.

TEDESCHI gives a well-written account of the actual application of this method of cure. The pain inflicted is slight. A cocaine spray has not been deemed necessary. When the pseudo-membrane is touched with the heated wire loop it curls up, finally sloughs off, and the ulcerated surface left does not reproduce the patch. If the whole exudate is removed in this way, the process does not extend beyond the limits of its former margins. After the above procedure, the fever, œdema, and glandular swelling all disappear. The period of the coming away of the eschar varies from the 8th to the 18th day. The immediate after-treatment is limited to the swallowing of chipped ice. Later, benefit may be derived from the customary steam and lime-water sprays and gargles.

The great advantage claimed for this method over the use of chemicals is in its perfect localization. Any solutions to be of great power must be so concentrated as to irritate surrounding tissues. Toleration of the latter necessitates a solution so weak as to be practically useless. A specific ulcer is by the cautery converted into a simple one—so say the advocates of the new method.

It will at once be seen that this idea premises a view of the nature of diphtheria which is still under discussion, and by many competent minds rejected, namely, that the disease is primarily a local one, and that constitutional symptoms arise from septic absorption through the lymphatic channels. Whether this be true or not, we know that many cases present themselves in actual practice where there can be no doubt as to the diagnosis, and yet where the throat does not present any exudation—in other words, where there is no indication for the use of the cautery. We do not think that under any circumstances the cautery method

of treatment will become popular in American medical practice. It must be looked upon as a therapeutic curiosity, and rather a forbidding one at that.—*N. Y. Medical Record.*

THE LOCAL TREATMENT OF CHRONIC DYSENTERY.—Briefly, as a text, I wish to bring more prominently before the society the treatment of chronic dysentery, locally, as proposed by DR. MARUY, of Memphis. Starting with the clinical fact that such cases as we recognize as chronic dysentery are due to lesions which exhibit themselves predominantly in the lowest part of the large intestine, we are enabled to treat them efficiently, and for the most part effectually, by local applications.

The method, so well known and practiced, consists in first thoroughly emptying the bowel by a saline, then anæsthetizing the patient, preferably by nitrous oxide gas, the patient being in the SIMS position; the sphincter ani is thoroughly paralyzed after the manner of METCALFE, a SIMS speculum introduced, which, if properly used, will allow a view of the entire rectum, exposing every point of ulceration, to which applications of nitric acid may freely be made by a rod with its end wrapped with cotton and dipped into the acid. It is essential that the acid be freely used, and any excess afterward neutralized by a solution of bicarbonate of soda brushed over the rectum before withdrawing the speculum. My uniform experience in a large number of cases lead me to expect that there will be no action of the bowel for twelve or fifteen, and even thirty-six hours after the application, and whereas it may be argued that applications to the rectum alone cannot possibly reach ulcerations which almost invariably exist above, I must answer that either the anæsthesia produced by the application allows time to heal them, or the relief following the subsidence of tenesmus permits the bowel above to regain, in some measure, and to maintain a normal peristalsis, thus favoring a return to a healthy action and normal state of the bowel as a result.

My experience leads me to expect, during the exfoliation resulting from the caustic application, which occurs from the second to the fifth day, that there will be a number of actions of the bowel, which, however, will be more natural in character. At the end of ten days it may be necessary to repeat the application of the nitric acid. There are cases, not many, however, which require more applications. Of course, the diet should be rigidly a milk diet.

I have spoken only of nitric acid, for I believe it far excels all other applications; in my experience it is far superior to solutions of the argentic nitrate, being less painful and more efficient. Properly applied, no slough should result, rather an exfoliation, followed by a normal development of epithelium over the entire mucous membrane.

To sum up: Astringent and narcotic remedies by the mouth avail but little.

Proper cleansing of the rectal mucous membrane and direct applications to the rectal wall, as well as to the ulcerations, tends to rapid and permanent cure.

Opiates are of service for a few hours after the applications; they should be given by the mouth or hypodermically, as the rectum after such applications fails to absorb.—DR. CHAS. S. WARD, in *N. Y. Med. Record.*

PYROGALLIC ACID IN THE TREATMENT OF SKIN DISEASES.—Pyrogallic acid is just now in vogue among many dermatologists, and there is considerable evidence as to its especial utility in certain skin diseases. DR. CHARLES W. ALLEA, of this city, has given a very complete account of the uses of this drug in an article in the Journal of Cutaneous and Venereal Diseases, for January, 1886. Introduced by JARISCH, of Vienna, about seven years ago, it has been extensively used since then by KAPOSI and NEUMANN, of that city; by SCHWIMMER, of Buda-Pesth; BESNIER, of Paris, and others, including several physicians of this city.

The diseases in which it has been tried have been chiefly psoriasis, lupus, epithelioma, and chancroid, but there seems to be no doubt that it is against lupus that pyrogallic acid acts best. The method of using it here, as described by SCHWIMMER, is as follows:

"Vaseline is first applied for several days, or as long as necessary to remove all secondary morbid products, scales, secretions, and dirt, a ten per cent. pyrogallic ointment is then applied during from four to seven days, being renewed two or three times daily. Vaseline is now to be applied again for one day to remove all of the acid. The entire suppurating surface is now to be covered with mercurial plaster, under which healing takes place in from ten days to two weeks. This process may be gone through with several times until no more tubercles appear. PROFESSOR SCHWIMMER says the treatment of a case seldom exceeds three or four months. A speedier and much better resolution of the most advanced and wide-spreading lesions, is found to take place under this combined plan of treatment than could be accomplished by the combined treatment of scarification and the thermo-cautery."

Occasionally some toxic effects are observed from the use of pyrogallic acid, but this is rare and only occurs when it is very extensively applied. It has not supplanted the use of chrysophanic acid in the treatment of psoriasis.—*N. Y. Medical Record.*

A NOTE ON LEWININ, THE NEW LOCAL ANÆSTHETIC.—By N. A. RANDOLPH, M. D., Instructor of Physiology in the University of Pennsylvania.—In the editorial columns of the Medical News of February 13, 1886, there is given a brief account of the physiological properties of a semifluid resin obtained from the root of piper methysticum.

In the method employed in obtaining it (extraction by petroleum-ether) two resinous bodies are obtained, the resin of lesser density only being efficient. To this body LEWIN, its discoverer, applies in his original communication the rather cumbrous tiltle of "alpha kawa resin," for which I have ventured to substitute the name lewinin, as above.

Although I have not been able to obtain, in my experiments with the extract in question,

results as marked as those presented by LEWIN, several points of clinical interest have arisen, which will, I think, be of interest.

When the semifluid lewinin is placed upon the tongue, there is a momentary burning sensation with increased salivary secretion, followed by a local numbness, which, while extremely superficial, is recognizable for more than an hour. Some pallor of the mucous membrane at the point of application is noticeable. I have several times swallowed about five grains of the extract thus placed upon my tongue, without appreciable results other than those noted.

Lewinin is too painfully irritating to apply in practice to the human conjunctiva, but it is my belief that, by the previous application of cocaine, the lewinin in solution could be instilled into the conjunctival sac, and produce its characteristic effect of prolonged local anæsthesia before the more temporary effect of the former drug had passed off.

The extract will probably be of service in dental practice, as its application certainly mitigates the discomfort of operation on the teeth of those suffering from sensitive dentine.

The most marked practical benefit, however, to be expected from the use of the drug is in cases where only a relatively superficial anæsthesia is desirable. Thus, as would have been expected, the drug is of value in rhinological practice.

DR. HARRISON ALLEN, to whom I handed a fifty-per-cent. alcoholic solution of lewinin, kindly reports that, in practice, he has found a number of cases of nasal trouble in which the drug could not only be availably substituted for cocaine, but in which its action was more satisfactory.

The extract just discussed was prepared for me something over a month ago by MR. LLEWELLYN, of this city, and was, I believe, the first specimen of the drug produced in this country. —*Med. News*, March 13, 1886.

CONVALLARIA MAJALIS.—Mode of application: The flowers, the leaves and the roots of the plant have been used. The most active parts are the flowers, and next, the leaves. The plant can be used either in its fresh state or in the form of an alcoholate, extract, or in its dry state, or in the form of a tincture or fluid extract. I do not mention the infusion because everybody acknowledges this preparation to be the most unreliable. Most frequently the extract is used, and you may prescribe the extract of the flowers or of the leaves as the most active. The different extracts are of a brilliant dark color, of a peculiar bitter flavor and soluble in all proportions in water and alcohol. You may use the following formula to advantage:

℞ Extract of the flowers or leaves of convallaria, 7 grammes.
Syrup of orange peel, 120 grammes.
Syrup of the five roots,* 120 grammes.

Give from 1.50 gramme to 2 grammes of the extract per day, that is, three or four teaspoonfuls of one or the other of these preparations. The tincture can also be used in the dose of from 2 to 4 grammes per day, but whether you use the extract or tincture do not calculate, I repeat here, on constant effects, and be always prepared to have numerous relapses.—MUGUET. —*Translation from the Repertoire de Therapeutique* of February, 1886.

*Sirop de cinqracines of the codex, composed of the roots of celery, fennel, parsley, asparagus and butchers broom.

A NEW GALACTAGOGUE.—Ditana digitifolia, a Mexican plant, has been recently put forward by PROF. GIURLEO, at a medical congress at Naples, as a galactagogue. He mentioned several instances in which the infusion had been given to nursing women, and had produced a marked effect, inducing a considerable secretion of milk, even when the flow had been nearly suppressed. The flowers are also credited with sudorific properties. On the other hand, PROF. GIURLEO finds that rhamnus alaternus and ligustrum vulgare diminish the secretion of milk. This property in the first-named plant was, however, pointed out forty years ago. It is administered in the form of an infusion of three grammes of the leaves in 150 grammes of water once every twelve hours.—*Exchange.*

A JAPANESE REMEDY FOR URINARY DISEASES.—Tsuchiakabi is the euphonious name of a Japanese drug, to which attention is attracted in the Lancet (p. 35). It is the dried fruit of an orchid indigenous to Japan. It yields its properties to water, to which it communicates an acid and bitter taste. The medicinal properties are considered to be due to a resin acid and glucoside. The Japanese employ a watery extract of the fruit for diseases of the urinary passages and bladder in cases in which cubebs and copaiba would be prescribed in this country. Over these medicaments it has the advantange of being free from disagreeable odor.—*Exchange.*

A SUBSTITUTE FOR OPIUM.—Withania somnifera, a plant belonging to the natural order Solanaceæ, has recently been tried by DR. TRABUT, of Algiers, in case of emphysematous dyspnœa, phthisis, and alcoholism, for inducing sleep. DR. TRABUT prefers it in some cases to opium, as a hypnotic. A bitter tincture, a crystalline sulphate of its alkaloid, and an extract, have been prepared by M. DUVAL.—*Exchange.*

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Original Articles.

CLINICAL LECTURE.*

BY PROFESSOR WILLIAM GOODELL, M. D., OF PHILADELPHIA.

MAMMARY FISTULA.

The first case that I have to show you to-day is that of a woman who was before you on a previous occasion for operation, but who then backed out. She now comes to us determined to be relieved. She has a fistula of the mammary gland, which, I wish to say to you, can nearly always be prevented by early and free incision of the gland, when there is an accumulation of pus. I would say that it should be a rule to guide you, always to incise when you can detect fluctuation, and I do not mean by this such fluctuation as you would get in an ovarian cyst, or in a large collection of fluid, for this distinct fluctuation you will very often not be able to get in mammary abscess when the amount is small, or when it is deep-seated. But to the educated finger there is given a sensation that indicates the presence of pus. The parts yield to pressure, as it were; the sensation is somewhat similar to that experienced when you press an œdematous leg. If, upon examining the breast, you find such a point, where there is no or less resistance, where your finger sinks, as it were, into a well, with margins about it, then would I use the knife. You may not feel quite sure and would like to use the exploring needle, and so you may, if you choose. But an incision will do no harm, even if you do not find pus. Such an occurrence would be more or less mortifying, I admit, but it would do no harm, for pus will surely form sooner or later, and you have provided a means of outlet for it. To open these abscesses I prefer to use the breast lance, because it is broad, and will thus make a large incision, and this is a point of great importance, for it is a common failing among men young in the profession, to make too small an incision when opening an abscess. You notice how I hold this knife; you see that I guard the point with my thumb and forefinger; thus, I guage the depth of my puncture, for the knife cannot go in beyond the depth of the point that is exposed beyond my fingers. Remember what I have told you before about the direction of the incision; it should always be made up or down, but never crosswise. The lacteal ducts, you know, radiate from the nipple like the spokes of a wheel, and if, when cutting up or down, you wound one of them, it will be only one, while if you cut crosswise, you will be very apt to sever several of them. Your incision should be very free, and you should see to it that it does not close up, for which purpose you can insert a drainage tube. You may use antiseptic precautions, when opening these abscesses, if you choose.

In this case there are two fistulæ that have resulted from an abscess, and I would like to make these two into one, and insert a drainage tube; but this operation would very much disfigure the breast. Therefore, I will enlarge each opening, doing so in the direction of the ducts, and will pass a drainage tube through one opening and bring it out at the other. Now, I want to make sure that there are no sinuses leading off from this fistulous tract, which I do by probing. Here I find one, leading off towards the nipple. Now I would very much like to convert all these openings into one, but by doing so, I would cut too many ducts. Therefore, I will merely enlarge these openings, being sure that I make them large enough, for it is better to err on the side of having them too large than too small. Now, all this trouble could have been avoided if the abscess that caused it had been opened soon enough. I would not speak quite so positively if I were called on the witness stand when a brother practitioner was being tried for malpractice; I would say that in the vast majority of cases such a course would prevent the formation of fistula, but it might have been that this woman was so run down that they would have occurred anyhow. Now I pass in a drainage tube, and this tract will be syringed out daily with a 1- to 2- per-cent. solution of corrosive sublimate, or, if you prefer it, with a 5- or 10-per-cent. solution of carbolic acid; this will greatly aid the healing process. The cure will, however, be very tedious, for this pyogenic membrane has been here now, secreting pus for four years. Now, I again look carefully to see if there are any conduits leading off from this tract. After a few days I will take out one of these tubes, but the other I will let remain in for a long time. I will now cover the breast

* Delivered at the Hospital of the University of Pennsylvania, Feb. 24, 1886.

with salicylated cotton, and bye and bye will resort to pressure, that is, when enough irritation has been induced to make the pressure of service. To make this pressure, I will thoroughly strap the breast; while an assistant holds the breast up, with the woman lying on her back, I will apply strips of plaster, about two inches wide, allowing one to slightly overlap the other. This strapping can be left on for forty-eight hours, when, if it has become loose, it can be reapplied. MR. CALLENDER, of London, had a way of treating abscesses when they were slow to heal, especially mammary abscesses, to which I have resorted with great satisfaction. It consists in a process of over-distension. When the contents of the abscess is squeezed out, I introduce the nozzle of my syringe, containing a five- or ten-per-cent. solution of carbolic acid, into the cavity, and somewhat forcibly inject the contents, holding the parts about the aperture firmly in contact with the nozzle of the syringe. The fluid is thus applied to every nook and cranny of the pyogenic membrane, and this I do daily for several days. I have, in some cases, experienced difficulty in closing up abscesses, but, in these cases, this process of over-distension has never failed me. I have used nitrate of silver in place of the carbolic acid, but, of course, the cases where this process is required are very exceptional.

In this case it seems to me very evident that the pointing of the abscess was left to nature, and I must say that if one good opening had been made I do not think we would have had all this subsequent trouble. I do not think that there is as much necessity for antiseptic precautions when we are working about an old abscess as when it is a recent one, for, as in this case, for instance, these surfaces have been exposed to the influence of the atmosphere now for four years. I will tell you frankly, gentlemen, that I have never opened a mammary abscess under the spray; I have not done so because I have had very few to open and they have always readily healed up. Again, I have not used the spray because, as I have told you before, I always endeavor to make the incision unknown to my patient, when her head is turned from me and she has no idea of what I am going to do. Of course I could not do this if I used the spray. When I first started out in practice I had plenty of mammary abscesses, but, of late years, my experience with them has been very limited. I do not know why this is so, unless it is because I use iodoform to the nipple. Lately I have used cocaine, which I believe gives relief to the pain, but I do not think that it exerts any healing influence, though I am quite sure that iodoform does help to heal, used in the strength of one part to four of vaseline. This is one reason, I think, why I do not now have abscesses. I am speaking now about cracked or fissured nipples, which I believe to be the cause of mammary abscess. It is a popular, but at the same time, a very erroneous idea, that the loss of the child causes abscess; that when a woman has a miscarriage, she is very likely to have a mammary abscess. With this idea, many physicians will rush into print, with the report of a case of miscarriage, where they have aborted mammary abscess with the application locally of belladonna ointment and iodide of potassium internally, and these drugs become vaunted as specifics, when, in truth, the chances are decidedly that the abscess would not have formed. This is a great mistake; I have had a very large experience and I say that I have never seen an abscess result from a miscarriage or the death of the child. Now I am speaking of puerperal abscesses; I recently opened a mammary abscess in a woman of sixty-five, which was a pure phlegmonous abscess, just as might occur on any part of the body, but I am speaking of abscesses of the breast in connection with the puerperal state, and of these I say that the great cause is a cracked or fissured nipple. Therefore when a woman has a miscarriage or her child dies, you need not worry yourself about the breast, let it go on, let it fill up; if there is much suffering you may give a little morphine and see to it that the bowels are kept well open. If the breast becomes very much distended and so very painful, it may be necessary to draw off some of the milk, not to empty the breast, for it will come back again, but just enough to give relief. This can be best done by the mouth of an infant, but as such are not always available, an adult mouth will answer, or, as is sometimes done by women, they may use a common clay pipe, putting the bowl over the nipple and making suction, with the mouth, on the stem. When, however, a woman has a cracked nipple you cannot predict what may happen. If the child could be at once taken away from the breast, of course no abscess will form, but this is obviously impossible, for, of course, the child must be nursed. But can we not do something to close the crack? It will close in time, but, of course, every time the child sucks it is torn open again; it is like a fissure of the rectum, which, while it seems to be a very insignificant affair, is yet a very painful affliction. I tell you again that belladonna is of no use to abort the abscess, and I do not like to apply it to a breast that a babe is sucking, because it is a powerful drug. As a rule, I apply nothing to the nipple, save a little camphorated spirits of alum, over which I put cotton and some rubber cloth, to prevent evaporation.

MENORRHAGIA—MASTURBATION.

Her is a woman in whom puberty was reached at the age of fourteen years; her menses were

regular and painless up to ten years ago, when she had hemorrhage, which has been at times profuse ever since, her periods frequently occurring every two weeks. She is now thirty years old, was married at the age of twenty-four and has been sterile. Well, now, what is the matter with the woman? She is white and thirty years old, therefore I would not expect to find a fibroid, and as she is sterile, I would not look for a cancer, because cancer is a disease of women who have borne children; if she did have a cancer it would be at the fundus, a cylindrical epithelioma, and such cases are so rare that I have only seen three in my whole experience; therefore, in an off-hand diagnosis, before I have made a digital examination, I would exclude the idea of cancer. To revert for a moment, fibroids are very rare in white women as young as thirty; if it was a colored woman, I would be much more inclined to look for a fibroid, for, in that race, I have found them in their teens, but it is exceedingly rare to find a fibroid in a white woman in her teens. Well, then, what might it be? It might be that the hemorrhage is due to a polypus or to fungous vegetations. The woman is now etherized, so that I cannot question her, but if I had learned that the bleeding was produced by coitus, I would have been more inclined to think that it was caused by a polypus near the external os upon which the male organ impinged; it would then likely be a polypus, or, if the woman had borne children, a laceration, which we will exclude, as she has been sterile. Now, when I examine the uterus, I find that it is not much enlarged, the os is a little patulous and the uterus is slightly anteverted, as it ought to be in a woman who has borne no children. Now, I find the uterus purplish and congested, and as I introduce the sound, I see a discharge of blood coming from it. The sound only passes a little over two inches; if there is a polypus inside, it must be a very small one; but I have seen very small polypi do a great deal of mischief. It has been reported that a woman died of hemorrhage caused by a polypus which was found to be not much larger than a pea. The amount of hemorrhage is not at all dependent upon the size of the polypus. I have had one case where the polypus was so large that it was necessary to use the obstetrical forceps to deliver it and to incise laterally the perineum to get it out, yet there was very little hemorrhage and, on the other hand, while I have not seen them as small as peas, yet I have seen very small polypi that have caused very considerable hemorrhage. Polypi, dangling from the os externum, are very common causes of a dribbling of blood; in such cases the women will tell you that their clothing is stained after coitus. I should tell you that I have made a very careful examination and satisfied myself that the woman is not pregnant, before I dared to pass the sound. There is no history of a miscarriage given to us, yet the symptoms point to an interrupted pregnancy and what we call an afluxion, that is a hemorrhagic flow, carrying away the ovum. It would seem to me that possibly she had been three or four weeks pregnant and that the ovum being washed away, some of the decidua had remained behind.

I will now pass in a curette and see whether there are any vegetations. I am removing some vegetations and something like a small polypus jumped out of the os when I introduced the curette.

You will sometimes encounter cases of menorrhagia in young girls that will be hard to combat and where you will not be sure of the cause; I have had several such cases. Last year I had such a case in a young girl who was anæmic and weak. I ordered rest and gave her iron, under which treatment she improved, but she did not get well. I then ordered for her Blaud's pill, which is made of the dried sulphate of iron and pure carbonate of potash, of each, two drachms, made up with glucose, into forty-eight pills. She writes me recently that she has now no hemorrhage, after taking nine of these pills daily for three months. I remember, also, the wife of a carpenter, who came to me suffering in the same way; she had a polypus the size of a medium apple; to her I gave dialyzed iron in drachm doses, which controlled the hemorrhage and lessened the size of the polypus. In these young girls, as a rule, you will be compelled to resort to very vigorous tonic treatment. Sometimes iron will not answer, and then you will have to give astringents or tonics that are not ferruginous in nature. I have, in such cases, used the bichloride of mercury with success, or quinine. In some cases there will be an appearance of robust health, and here I have derived good results from iodide of potassium.

It is barely possible that the hemorrhage in this case may have been kept up by repeated efforts to prevent conception, for such is often the case. I want to call your attention to something very significant about the vulva. If this woman had come to me and said that she was unmarried, I would be very much inclined to think that she was addicted to masturbation. You see how greatly elongated are the nymphæ, there is general hypertrophy of all the parts, and the clitoris and its hood are much enlarged. Of course, I am not sure that this woman masturbates, but such appearances are very suggestive and should always raise such a suspicion in your mind. When I see such a condition, I generally have the courage to ask the question, but sometimes I have not. The clitoris is much lower down than it ought to be and the parts all seem to be stretched, which is usually the result of an up-and-down friction, such as will be produced by masturbating with

the hands, a book, or the heel of the foot. I had a case once where this vice was a disease, and where, in spite of the utmost vigilance on the part of the nurse, the patient would masturbate with her heel. I do not believe that this vice is as common among women as among men; there are several reasons why I so think. In the first place, the sexual feeling is not so strong in woman, which, I think is a very fortunate circumstance, for if it was as strong as in men, I should like to know where virtue would be. Man is the aggressive animal, while woman is not, and, again I say, where would virtue be if she was? Another reason is that the male organs are all external, so subject to more excitation than are those of the female that are all protected; but the greatest reason of all, I believe to be, is that nature so intends, that nature has made woman less passionate than man. I have frequently had good, virtuous women come, too, who had no children, but were desirous of them, who tell me that their husbands complain that they repel their approaches, and they have told me that they never experience any desire, while I imagine that you will agree with me that it would be a sight to encounter a man who was without passion; therefore, from these reasons, I believe that masturbation is less common among women.

To go back to our patient; after using the curette, I will apply iodine to the cavity, which will destroy the unhealthy surface, or, to speak more correctly, will make it more healthy, and it will also destroy the vegetations that I have bruised, but not removed; and it will also, at the same time, act as a disinfectant. I will not introduce an opium suppository here, as I frequently do after operations about the uterus, for when she comes from under the influence of the anæsthetic, she will have very little pain. In conclusion, I would again say that this hypertrophied condition of the parts would make me suspect that she masturbated, and it might prevent the penetration of the male and so account for the non-conception.

ENLARGED OVARY.

This woman has been sent to me from a long distance. Yesterday I received a letter from her physician, asking me to admit her to the hospital. Last night I wrote him not to send her for two or three weeks, as we were crowded, but this morning she arrived with another letter. Her doctor writes me that he has made the diagnosis of an enlarged and dislocated ovary, and that, having tried various internal remedies without avail, he sends her to me for operation. He uses the word ovariotomy, and he is correct, though we usually make this distinction. When we operate upon a cystic ovary, an ovary where there is a collection of fluid, we call it ovariotomy, but when the ovary is solidly enlarged or dislocated and we remove it, we call it oöphorectomy. The patient tells us that she has so much pain in her back and in the right side of her pelvis that she is incapacitated for work. Now, when I introduce my finger into the vagina, I can plainly feel a tumor in the right side, which, I can swear, is not connected with the uterus, because I am resorting to bi-manual examination, I have one finger in the vagina and the other hand over the abdomen. I can outline the uterus and I can plainly tell that the tumor is distinct and separate from the uterus; it is close to it, but there is no attachment. The uterus is anteverted and slightly flexed, which we might expect when we learn that she has had five children; there is also a laceration of the cervix. Well, now then, we have a tumor located posterior to the uterus and I think it is cystic, but she complains that by pressure I give her pain, while pain is not a characteristic of cystic ovaries, but this I can account for on the ground that there is some of the normal ovarian tissue left. The woman, I neglected to say, is thirty-seven years old. Well, now, what shall we do? If this woman was rich and could afford to be idle, I would put her to bed and tell her to wait a while and see what we could do for her; but she is poor, her affliction debars her from earning her living, and it is questionable whether we could do anything for her, now that all suitable treatment has failed. The operation of oöphorectomy, which is a very successful operation, is about all that is left for her. We will talk the matter over with her, and most likely do the operation. I find a pretty bad tear of the cervix; now if we wanted to temporize, we might apply iodine to the cervix and see what effect that would have. If the ovary was not enlarged we might hope for some good from this treatment of the cervix, but there is a more serious trouble behind this laceration. This is an exceptional case among those that are sent to me for oöphorectomy, for, as a rule, the operation is not indicated, but here the wisest surgery undoubtedly would be to remove the ovary. Now, the ovaries are like the eyes; when one is diseased the other is apt to suffer from sympathy, so that even though I may remove the right ovary I may fail to cure the patient if I leave the left, even though it may not be apparently diseased. I would say that unless it is very important, as for financial reasons for instance, that a woman should have children, it will be better to remove both ovaries when you undertake the operation, but always have a clear previous understanding and consent. SIMS found his mistake in removing only one ovary and thereafter did the double operation, and nearly all operators have had a similar experience.

[OFFICIAL REPORT.]

CHICAGO MEDICAL SOCIETY.

Stated meeting, March 15, 1886.

The president, C. T. PARKES, M. D., in the chair.

DR. ROBERT H. BABCOCK made remarks on

TWO CASES OF MITRAL STENOSIS,

with presentation of the patients.

DR. BABCOCK said that he did not intend to give any discussion of mitral stenosis, but merely desired to present a few points of interest in connection with these patients. Mitral obstruction is due to a fusing together of the valves so that they project into the ventricle in the form of a funnel, which, according to many author, is the most frequent form of stenosis; according to others, the obstruction is due to a septum-like valve stretching across the opening, and called the diaphragmatic valve. Owing to the obstruction of the flow of blood from the auricle into the ventricle, a murmur is produced, which is rolling or blubbering in character, and, occurring during the auricular systole and previous to the systole of the ventricle, is called pre-systolic, or auriculo-systolic. This murmur has been graphically represented by BALFOUR as in some cases resembling the sound of "voot-rrrb," the final t or b being the sudden, abrupt first sound produced by the ventricular systole.

In some cases no pre-systolic murmur, correctly speaking, is heard, only a diastolic murmur, which, being loudest at the apex in the mitral area, is a mitral diastolic murmur. This murmur should be differentiated from the diastolic murmur of aortic regurgitation, which, in certain rare cases described by BALTHAZAR FOSTER, has its maximum of intensity in the mitral area, and not at the centre of the sternum.

In the two cases DR. BABCOCK presented, the murmurs differed from each other in character, in the one case the murmur being very distinctly represented by the letters voot, in the other by "rrb." The doctor was disappointed at the last moment by his inability to present a third patient, a man in whom the stenosis was indicated by a mitral diastolic murmur, which followed an impure first sound of heart, and both the impure first sound and the diastolic murmur were in this case audible at the lower angle of the left scapula. The propagation of the diastolic murmur so far to the left, is very unusual; indeed, the production of the mitral diastolic murmur is itself very rare, and is probably due to the fact that a rush of blood from the left auricle to the ventricle occurs with greater force at the beginning of the ventricular diastole than during the auricular systole, the auricle being dilated rather than hypertrophied, according to SANSOM. The cases were then examined by members of the society.

DR. E. C. DUDLEY reported a

UNIQUE CASE OF VESICO-VAGINAL FISTULA,

in which the entire vesico-vaginal septum, the vaginal portion of the cervix, and anterior wall of the cervix to the internal os had sloughed away, leaving no bladder tissue between the inner extremities of the urethra and the points at which the vesico-uterine ligaments connect the bladder with the uterus. The only operation which seemed possible was to unite the posterior wall of the cervix uteri with the neck of the bladder. This would turn the uterus into the bladder and necessitate menstruation through the urethra. The anterior wall of the uterus could not be approximated to the neck of the bladder, but it was found, on further examination, that the mucous membrane of the bladder, if caught with the tenaculum about an inch in front of the uterus, could be drawn to the neck of the bladder and held without undue traction. The operator therefore undertook to close the fistula in this way, by denuding a strip of the mucous membrane of the bladder from side to side an inch in front of the uterus, and thus he utilized that portion of the bladder between the line of denudation and the uterus, and made it a substitute for the lost anterior wall of the cervix and vesico-vaginal septum. Twenty-two silver wire sutures were employed after SIMS' method. Union by first intention followed, notwithstanding the failure of the nurse the third day to keep the catheter *in situ*, which allowed several ounces of the urine to accumulate in the bladder. Notwithstanding the decrease in the size of the bladder, necessitated by the operation, the patient experiences no difficulty in retaining the urine all night. The operator is not aware that another case of this kind has been previously reported.

The President asked if it was not possible that some portion of the upper wall of the vagina was drawn upwards and backwards by the bladder, and what was taken to be a continuous wall of the bladder might be a part of the vagina. He had seen a case where there was a large laceration into the bladder, and the opening seemed one cavity with continuous walls, but the flap thrown backwards was post-vaginal, and it was found that this flap could be drawn up and into its position.

DR. E. C. DUDLEY, in answers to questions, said that the loss of tissue at the base of the bladder from sloughing differs from that by excision. In the latter case the ureters would perhaps be included in the excised tissue, but it is seldom that a slough of the base of the bladder in vesico-vaginal fistula, however extensive, destroys the connection between the

bladder and the kidneys. Even if the points through which the ureters penetrate the mucous coat of the bladder be lost, it is yet possible their openings into the bladder may be preserved, because the ureters penetrate the muscular coats nearly an inch from their normal points of opening through the mucous coats of the bladder, and run obliquely between the two coats for a distance of nearly an inch. In this case, as in many cases of loss of entire base of bladder reported by EMMET, the openings of the ureter were on either side, at the very margins of the fistulous opening. The operation was performed at Morton, Ill., in the presence of DR. HARRIS, of that place, and DR. MANSFIELD, of Metamora. DR. PARKES' surmises with reference to the vagina wall could hardly be correct, because this, together with the anterior wall of the cervix uteri up to the internal os, had sloughed away. His surmise might be correct with reference to certain tissues between the bladder and cervix uteri which might have retracted and become adherent by inflammation, so as actually to form a portion of the bladder wall. Moreover, there is always a very decided difference in color and appearance between vaginal and bladder tissue, and the tissue in this case was to all appearance like the tissue of the rest of the bladder, and to the touch gave the sensation of a thin wall. DR. BAKER, of Boston, reports a case similar to this in that he introduced sutures into the bladder tissue, but so close to the cervix uteri as not to draw down any portion of the interior of the bladder, to be used as material in place of the lost vaginal wall.

DR. W. L. AXFORD reported

A CASE OF REMOVAL OF THE ENTIRE LOWER JAW THROUGH THE MOUTH.

HARRY T., aged 5. Admitted to St. Joseph's Orphan Asylum in November, 1885. It was noticed that his mouth was frequently swollen and sore. Child very much emaciated. In January, 1886, he had measles. Tedious convalescence followed. Came under observation about February 1. Weak and thin. Lower part of face very much swollen. Breath offensive. Symphysis of jaw bare. Could not examine further at this time. Pulse 120 to 130. Put the child on supporting treatment, hoping to get him in condition for an operation. No improvement at the end of two weeks. Feb. 16 the patient was anæsthetized and the mouth explored. Found the jaw on either side stripped of its periosteum back to the masseters. Determined to attempt removal through the mouth, as any cutting operation involving the loss of much blood would have been fatal at once. Divided the jaw on either side of the symphysis with bone pliers and thus removed a large portion of the body. Seizing the remaining pieces with sequestrum forceps and making moderate traction, they were easily enucleated by the index finger of the left hand. Not more than a tablespoonful of blood was lost. Patient rallied well. Some reaction on second day. On third day the pulse had dropped to 116, and with exception of a swollen parotid on the left side, the child was in better condition than before the operation; so much so that a recovery was confidently predicted. A severe attack of diarrhœa occurring on the morning of the fourth day was followed by death in thirty-six hours.

DR. ARNOLD P. GILMORE exhibited a patient on whom he had performed an operation for

SYMBLEPHARON OF THE LOWER LID,

due to a burn by molten iron, and in which three plastic operations had been unsuccessfully performed. Nine months previously the entire lower lid, from external to internal canthus, was adherent to the eye-ball, covering almost the entire cornea. This triangular-shaped tissue was covered by a pale membrane of cicatricial tissue. The operator first detached the lower lid and transplanted the conjunctiva of a rabbit. For six weeks the operation was apparently successful, but after an absence of two months from the city he found the lid was again becoming adherent. Six weeks previous DR. GILMORE made a thorough dissection, freeing the lid and making a deep cul-de-sac, leaving the upper half of the eye-ball covered by mucous membrane and the lower half bare. A semicircular band of conjunctiva, one-third inch wide, was cut close to the cornea above, leaving a bridge of tissue at each end. This band was dropped into the cul-de-sac below and carefully stitched to the ball. A semi-circular plate of silver long enough to fill the space between the external and internal canthi, with two holes at the circumference, one-half inch apart, threaded with silver wire, was dropped into the cul-de-sac to prevent adhesions, and fastened by bringing the wires through upon the face and fastening them by small lead plates and perforated shot. For this operation DR. GILMORE claims priority. The object of the operation was neither to improve the appearance of the eye nor restore vision, but to relieve the irritation of the other eye, by allowing coördinate movements of the two eyes. There was enough clear cornea left to make an artificial pupil in case the patient ever lost his well eye. There was little reaction, and at no time much pus, while the well eye has grown stronger in spite of the presence of the plate.

DR. TILLEY thanked DR. GILMORE for showing this case, but thought that if the doctor were to go out of town again for two months as in the first instance, he would find at the expiration of that time the conditions relatively very much the same as on his return after the first operation. He thought there was little

fundamental advantage likely to be associated with the operation, as he thought that in a short time the wire and plate would cause a certain amount of atrophy of the intervening tissue and the plate be forced up out of position, making the operation of no avail. If he was so unfortunate personally as to be placed in a similar position, he would have his eye enucleated.

Dr. E. L. Holmes thought it was unwise to say that a certain thing could not possibly be accomplished, but he had been through the experience of putting in plates, and seeing it done, and never saw one permanently successful. It is different with a very narrow symblepharon in which the globe and eyelid are grown together, where by dissection and transplanting the mucous membrane excellent results may be attained. He thought the plate would irritate the cicatricial tissue and cause it to be very much thickened, and after a few months, or weeks even, when everything was removed, there will be the same tendency to creep over the cornea and make adhesions with a broad union. He thought it absolutely impossible to get an artificial eye to fit. A very small eye might be used and temporarily make it appear that the patient was better off, but that small eye will often irritate and cause the cicatrix to increase.

The president thought that this case was one of the same category that is so troublesome to the general surgeon, the improvement of deformities from cicatrices of all kinds, in which relief comes only in the way that Dr. Dudley has applied in gynecology, after the divided cicatrix has been separated as widely as possible, by drawing together the healthy skin or tissue between the two ends of the divided cicatrix. This method has long been in use in general surgery. So far as his experience went the application of any foreign body between these divided surfaces has never been followed by success, so far as prevention of contraction goes.

The president presented an

ENCAPSULATED SARCOMA OF THE THIGH.

It had been in alcohol for some time, and was reduced about one-third in size. It had grown the full extent shown in three months, and was removed from an old lady aged 69. It was found growing upon the posterior part of the upper portion of the thigh; was a firm, smooth tumor to the touch, and, as far as external manipulations determined, could not be distinguished positively from other parts of the surrounding tissues. He could not determine whether it was or not attached to the bone, but from external appearances it was diagnosticated to be of a malignant type. The external surface was crossed by a large number of varicose veins. After removal it was shown to be a sarcoma. The interesting point was the rapidity of its growth. He thought it a singular coincidence that about a year previous he had removed a similar tumor from the upper portion of the left arm of an old man of 72 years, which had also grown to the full size in three months. Upon exposing the tumor a perfect capsule was reached, and it was easily enucleated from its bed.

ANIMAL MAGNETISM.

BY J. HOKE, M. D., CORDOVA, ILL.

There are so many new remedies almost daily brought forward claiming the attention of physicians, that I may be pardoned for inviting attention to a very old one, one that I cannot help thinking has been quite too much neglected. I refer to animal magnetism, which therapeutic agent has been used for the relief of human suffering, and the cure of disease, almost from the dawn of history to the present time, and the narration of the success of its application for this purpose is wonderful indeed. It was in constant use, and held in the highest esteem among the ancient Egyptians, Chaldeans, Indians, and Chinese. A history of the great success attending its use among the Egyptians was brought to Greece by Pythagoras, who spent some twenty odd years there in the study of philosophy and the sciences then taught in Egypt. From Greece a knowledge of the use of this remedy then spread over Europe.

So far, however, as I can learn from the history of the use of this agent among those ancient nations, and even later by Greeks, and Romans, and other of the European nations, it was always used empirically, for I find no where any attempt made to explain scientifically how it relieved suffering, and effected cures in diseases, but of the fact that it did relieve pain, and was the means of curing supposed fatal diseases, there can be no doubt. The mode of its application for inducing hypnotism, and for restoring to health those who were sick, is now essentially the same as practiced thousands of years ago, that is by making passes over the diseased parts with the hands, or by steady contact with them. I have made many experiments with this agent, extending over a number of years, and have studied carefully the results, and now think that this remedy can be reclaimed from the empiricism of the past, and put upon a legitimate scientific basis. That at least shall be the aim of this paper.

In the study of the constitution of matter and its attributes, we at once perceive that it is never in a fixed state, but that it continually changes from state to state, each finer or more differentiated than the preceding, and we find also that this is not the result of peculiar chem-

ical combinations, but that it is an inherent principle belonging to all elementary substances, whether in inorganic or organic bodies, and and as all matter is primarily elementary, however combined, we can come to no other conclusion than that all matter eternally changes by virtue of this universal life principle in it, and which is also the cause of its evolution.

It is a well known physiological fact that life precedes organization; is, indeed, the cause of it. Cosmic matter in developing into organism has nothing added to it, and nothing begins to exist except the form, through which it is capable of differentiating matter so as to become suited for the development of the various organs, whose functions in harmonious action constitute the individualized life and being.

The peculiar attribute of matter we call magnetism, through evolution passes from a coarser to a finer or more differentiated state, and if it is not life itself we know that it readily combines with the organic life forces by causing innervation, and so enhances the vitality of the organism, and if from any cause it is withheld, or taken away from a person, life languishes; hence the well-known danger of permitting young children to habitually sleep with old persons, who rob them of their vitality, because they are always magnetically negative. All healthy persons from infancy until the approach of old age, are magnetically positive, and for this reason disease can not attack a person while in this state; a magnetically unbalanced state of the system is always a necessary precursor of disease. This state may be general or local, may come on suddenly or gradually, but the result is ever organic derangement, which, however, the *vis medicatrix naturæ* which is but the constant tendency of the magnetism of the system to maintain an equilibrium, is calculated to correct. In this way the system unaided by art often repairs serious derangements by re-establishing the magnetic equilibrium in it.

The cause of acute local inflammation is always, when idiopathic, an extremely magnetically negative state of the vaso-motor nerve fibres of the part, which leaves the capillary vessels in a positive state, while the effect of the general system tends to restore a balance. This causes engorgement in these passive vessels, which results in the "Rubor et tumor cum calore et dolore" of Celsus. Now, if the hand of a strong healthy person is laid upon the part of the body in which this inflammation in its initial stage exists, the magnetism from the hand will instantly pass into these negative nerve fibres, and this restores them to their normal vitality, which causes the capillary vessels to contract and unload, and the inflammation will cease because an equilibrium is re-established. In most cases it will not require over thirty minutes to accomplish this result. Of course, it is only in the very early stage that such prompt results follow.

In cases of pneumonia in children and other inflammatory troubles, I have had some very gratifying recoveries solely form the use of this agent.

All organisms are built up or organized from cosmic matter, with nothing added except a force to individualize it, as stated before. In this state it becomes, as it were, a little world within itself, but remains subject to the universal laws of matter. If we now study the terrestrial magnetic currents we find them in constant motion but not always harmonious, for we sometimes have magnetic storms, when all is in confusion, the needle of the compas no longer points unerringly towards the polar star, but any where else. Let us now apply this cosmic confusion to the little world of the human system with its negative or vital currents in confusion, and we have general convulsions. When a patient is in this state the right hand of a strong well person laid upon the forehead, and the left upon the inside of the leg, the stronger current of the operator will arrest the convulsion and re-establish harmony in the system. The convulsion will at times cease instantly, and seldom continues more than a minute or two. Of course the cause, whatever it may be, must be removed by appropriate after-treatment. Again, old persons sometimes become paralyzed from extreme enervation, without any apparent organic lesion; persons in this state are magnetically very negative. When paralysis results from this cause, five or six strong healthy persons should join hands alongside the patient's couch, the loose hand of the first should be laid upon the forehead, and that of the last upon the inside of the leg, so as to form a closed circuit, and the contact should then be continued for one hour at a time, and repeated every twelve or twenty-four hours. This treatment will generally restore both motion and sensation, in from five to ten days.

I will here give the result of a few experiments, taken at random, from many.

M. O., aged 4 years. The child was insensible and in violent convulsions when I first saw it. I laid my right hand upon its forehead, and the left upon the leg. As soon as the contact was made the convulsions ceased. Thinking it might be a mere coincidence, I broke the contact, when the convulsions immediately returned. I tried this several times with the same result; I then continued the contact for fifteen minutes, and there was no more return. I then ordered a few doses of sulph. quinine, to prevent a return of the paroxysm of intermittent fever, which was the cause of the trouble, and the child was well.

W. M., aged 70. Generally healthy. Became suddenly paralyzed; wholly unable to move

any member of his body. There was also nearly perfect anæsthesia present, but no apparent lesion anywhere to be found. Nervous exhaustion seemed to be the cause of the trouble. I had his son procure the attendance of five men besides myself. I laid my right hand upon the patient's forehead, then the balance joined hands, and the last, or sixth, laid his hand upon the leg, which closed the circuit. Contact was continued one hour, and repeated every twenty-four hours. Improvement was noticeable on the third application, and the day after the sixth the man walked about town apparently well. Motion and sensation were fully restored. Within a year, however, he went down from nervous exhaustion.

It is but proper to state that in my experiments with this therapeutic agent, I obtained much more satisfactory results in the treatment of the diseases of children than those of adults. I seldom failed in making a favorable impression in the early stage of most inflammatory diseases among children, and also those of debility and nervous exhaustion, but in this latter class of ailments I have also had many very satisfactory results in adults, more especially when the power of a battery of three or four persons was brought to bear upon the patient.

While battery and animal magnetism are the same thing, the latter is, through evolution, so differentiated, that a person in a magnetically negative state will very readily absorb it from one in a positive state, but the former can be sparingly utilized by even a debilitated person, because it is much less progressed. This principle is universal in nature, and is the reason why the phenomenon of life is less evident in unorganized substances than organized things, and the most advanced organisms always give the highest expression of life and intelligence because of this fact.

PEACH-ROOT TEA IN EPILEPSY.

BY J. L. DORSET, M. D., DORSET, VA.

I notice, in the MEDICAL AGE of the 10th ult., that GROSS, BARTHOLOW, and BROWN-SEQUARD, all recommend the bromides in the treatment of epilepsy.

I wish briefly to call the attention of physicians to a remedy for this disease, that is cheap, efficient and simple, and one which I prefer to any of the bromides. DR. BARTHOLOW states, in his clinical lecture on the subject, that "when you have a case where the patient tells you that the attacks occur exclusively at night, then you will know that you have the very worst type of case to try to influence by treatment." I will herein report just such a case to illustrate the remedial virtues and value of this remedy. I refer to what is called here, in domestic practice, peach-root-tea, which is an infusion of the bark of the root of the peach tree. It may be thus formulated:

℞ Cort. rad. persicæ vulg., ℥ i.
Aquæ bullientis, ℈ i.

Macera per horas 24, in vaso leviter clauso, et cola.

S. About one ounce to be taken three or four times a day.

Enough alcohol may be added in warm weather to keep it from spoiling.

Case: MRS. R., the mother of four children, had been suffering for more than twenty years from epilepsy in such frequent and violent attacks, that serious impairment of her mind was apprehended. She had been treated by many physicians, both city and country doctors, with no permanent benefit, when I prescribed for her, about three years since, peach-root, "only this and nothing more." She told me, only a few days since, that this remedy had done her more good than all the doctors combined under whose treatment she had placed herself, and that she had been free from an attack, since she began to take the tea, as long as nine months at a time, and even then it was ascribed to imprudence in eating at night, whereas, before, she had had as many as four or five attacks in a month. Her appetite, digestion, and general health have greatly improved. She wants to eat even fried cabbage for breakfast and boiled cabbage for dinner, to use her own language, and does so with impunity. She still continues to take, three times a day, this valuable sedative and tonic, both as a curative and prophylactic. When I was a medical student, that distinguished professor, DR. J. K. MITCHELL, told me to have "no hobbies," but I must differ with the learned and talented doctor. The very best way to learn all about the qualities of a horse is to use him constantly, and the best way to learn all about a medicine is to use it perseveringly, and watch closely its effects under varying circumstances and conditions, and then report the results.

Being on one occasion in the office of one of Virginia's most distinguished physicians and surgeons, J. P. METTAUER, M. D., LL. D., and having a running discussion with him (somewhat after the order of the *calamo currente*) on medical topics, I asked him what he gave for epilepsy. He replied, "horse crusts." In my ignorance I asked him what that was, when he informed me that they were the round, naked growths on the legs of the horse. He told me afterwards, however, that the most successful remedy that he had employed was issues in the deltoid muscles. I notice that DRS. BOURNEVILLE and P. BIRCON, after considerable experimentation with it, report unfavorably as touching the employment of curare in the

treatment of epilepsy. Scutellaria has been used successfully in this disease. PROF. BARTHOLOW alludes, in the same lecture, to "unilateral sweating." I know an old physician whose left temple was invariably suffused with perspiration whenever he eat red pepper. He said to me on one occasion, that he could always tell when his food was seasoned with red pepper, even when he could not taste it, by the sweating that would occur in that locality.

I read, in the same number of the AGE, a short article on the employment of manaca in rheumatism. I received a sample of the fluid extract of manaca from the very reliable firm of PARKE, DAVIS & CO. (who have become celebrated for the purity of their medicinal preparations), and gave it to a patient who had long suffered from chronic rheumatism in a very aggravated form, with swelled joints, in which it acted like a charm. My patient was delighted with it, and so was I, believing that I had found a medicine that was probably a specific for a disease that is generally so hard to eradicate from the system. I was so encouraged by this experiment with it, that I went to the drug store of PURCELL, LADD & CO., Richmond, Va., and bought a bottle of it containing about six ounces, and gave it to her, but when I saw her again, she informed me, greatly to my disappointment, that it did her no good whatever. Not until then did I learn, upon an examination of the label on the bottle, that it was not manufactured by P., D. & Co., and I was persuaded that that accounted for its inertness. Every dose of the first did her good, while no dose of the second did any good.

Moral: Always use pure medicines of normal strength, if you can possibly procure them, and give them a *fair trial* before you condemn them.

I wish that every well educated and intelligent physician, who is a close and accurate observer, would have at least one "hobby," and ride it on all suitable occasions, and then publish all the facts observed, that would contribute to our edification. BROUSSAIS says: "Medicine is enriched by facts only." HIPPOCRATES, the celebrated physician of Cos, who lived more than two thousand years ago, seems to have been of the same opinion, and so is the present writer.

UNTOWARD EFFECT OF CHLOROFORM.

BY G. A. TROTT, M. D., BUCKHOLTS, TEX.

I was much struck by the singularity of the case reported by C. M. SUTLIEF, M. D., in your issue of March 25th, in regard to the untoward effect of chloroform, and in the hope of receiving some light myself, report the only case of untoward effect that has ever come under my observation. MR. R., German, brought his wife to my office on the 12th day of January, 1885, suffering from mastitis of the right breast. As she was very nervous and showed extreme horror of the use of the lance, I administered chloroform, incised the gland, deeply, and bathed her face in cold water. She was not unconscious exceeding ten minutes, and on coming to cried out: "Oh, doctor!" and fell back in a dead faint. I had her placed in a horizontal position, and prepared a drachm of the fluid extract of coca, which I administered as soon as consciousness returned, which was in about five minutes. For two hours she continued to faint every five minutes, in spite of the use of stimulants and continuance of the horizontal position. At the end of this time the fainting spells ceased, and no bad effects followed.

A case related to me by DR. MIECKOWSKI, of Belleville, may throw some light on these cases and cause us to doubt whether the chloroform was responsible in either DR. SUTLIEF'S or mine. The doctor pulled a tooth for a stout and hearty negro without the use of any anæsthetic, and was surprised and somewhat alarmed as the negro fell to the floor, apparently dead, simultaneously with the extraction of the molar. Said he: "I at first thought it merely an ordinary fainting fit, and used the usual treatment, without effect, and was seriously alarmed at discovering no pulsation or respiration. I worked for some time in vain, and rigor mortis was becoming painfully perceptible, when I bethought me of my galvanic battery. I immediately applied the current to the back of the neck, and had the satisfaction of seeing my dead man restored to life."

In view of this case, and the fact that DR. SUTLIEF'S wife was not anæsthetized, and MRS. R. only for a few minutes, I am inclined to think that all these cases were the effect of reflex action, causing paralysis of the nerve centres. The sequel in the case of MRS. S. would seem to bear out this theory, as all the symptoms mentioned by him as preceding her death, viz., hair dry, complexion muddy, loss of flesh, and steady decline, conclusively point to lack of nervous vitality.

A new egg-disease has been discovered. It is described by DR. D. F. WRIGHT, in the Bulletin of the Tennessee State Board of Health, as an inflammatory adhesion between the membrane covering the contents of the shell and that lining the shell. It is particularly liable to occur as a result of the shaking to which the egg is subjected in railway transportation. Inasmuch as inflammatory products can scarcely be held to be wholesome, doubts are expressed of the salutary nature of eggs thus affected.

Correspondence.

A CASE OF SUSPECTED CHOLERA IN PINCONNING, MICH.

March 19, 1886, I received the following from W. B. ABBOTT, M. D., health officer of Pinconning, Mich.:

"On evening of 16th inst. was called to attend MR. A. T. SMITH, aged 43, who was taken at about 7 p. m. with vomiting and diarrhœa, soon followed by cramps. When called I found him in this condition, which was rapidly growing worse. I soon controlled the former symptoms, but the cramps continuing, DR. C. T. NEWKIRK, of Bay City, was called in council.

"The matter vomited and dejected was a clear serous liquid, slightly acid, and in very large amount. Soon symptoms of collapse came on, the extremities became cold, and the pulse decreased, and, finally, ceased at the wrist, the sight left the eyes, and roaring sound filled the ears, the voice became hoarse, the face assumed a most anxious expression, the eyes became lustreless and fixed, the cramps were most distressing; by 11:00 p. m. the symptoms began to abate. At 11:30 DR. NEWKIRK arrived, who pronounced it a case of cholera, and as this doctor had attended a very large number of cases in South America during the great epidemic there, I thought it but right to respect his opinion so far as to write this description. There was not the bilious matter in the emesis, but 'rice water' vomit instead. The patient is improving, but is still followed by suppression of urine."

March 19 I went to Pinconning to investigate. Since my return I have received a letter from DR. C. T. NEWKIRK, of Bay City, Mich., who was called by DR. ABBOTT to see the case, in which he says:

"The skin was cold and covered with a dampness which I believe is pecular to cholera; lips and skin were blue; the voice was hoarse; stools were of the nature of rice water; no blood or bile was ejected; legs, arms, and stomach were cramped terribly; pulse very low; eyes sunken; labored breathing; great thirst. The nose and tongue were cold; there was suppression of the urine; the face was pinched; temperature 97°. After about two hours the body began to get warm, and in eight hours pulse came up to 120. Temperature, 103°."

DR. NEWKIRK also says: "I have had a large experience with cholera, and have no hesitation in pronouncing this a case of Asiatic cholera."

DR. NEWKIRK is a graduate of Victoria College, Toronto, and is an old practitioner.

I reached Pinconning at 11:20 p. m., March 19, and immediately made an investigation of the case. The patient was yet in bed. MR. SMITH is a prominent lumberman, 43 years old. He still looked haggard, and appeared somewhat restless. His tongue was not coated, his pulse was full and strong, and not much faster than normal.

By questioning the patient and others, I verified, so far as non-professional observers could verify, the observations of the physicians. From the patient I also elicited the fact that during his attack he did not suffer from colic, nor from much pain in the bowels, and that the passages were painless. His first loose discharge was while he was in camp, eight miles distant, but as he did not use a privy, it seemed impracticable to secure any disinfection of the substance. He and his wife were unusually intelligent persons, and MRS. SMITH suspected from the first that it was cholera. All discharges were received into vessels containing copperas. When these cases are not followed by other cases, they are not usually believed to be Asiatic cholera, but owing to this intelligent precaution of the family, and to thorough measures of disinfection afterwards ordered, and which have probably been used, this test will not apply.

Besides giving directions as to disinfection, which I was assured would be faithfully attended to, I made inquiry as to the possibility of MR. SMITH'S having accidentally taken some irritant poison, such as tartar emetic, or corrosive sublimate, but no probability of that kind could be made out. I also made vigorous efforts to learn any possible way in which cholera might have been brought into Pinconning. Immigrants had recently arrived in the vicinity, but none were from a place which was known to be infected. The men in the camp where the patient had been had not been outside the state, nor had MR. SMITH been out of the vicinity. As to fruits from the Mediterranean, oranges had been in the house, but the patient is not fond of oranges. He is fond of raisins, however, and has been in the habit of eating them uncooked. A box, partially emptied, in the house, apparently came from Valencia, Spain, and the raisins were not coated with sugar, but were apparently fresh, probably of the crop of 1885, at which time cholera is known to have prevailed extensively in Valencia. Whether there is any connection between the box of raisins and the case of illnesss, is yet problematic.

The water-supply in Pinconning is from wells, which are now (March 20) full nearly to the surface of the ground; there is not much purification of the water by filtering through the few feet of sand and sawdust which overlies the clay. One well in front of a public house is about thirty-five feet from that part of the railroad track which is under the closet of the passing cars, so that if there should chance to be any droppings from the closet of a passing car, it might with the spring rain be washed

almost immediately into the well, and be quite freely distributed to those who drink from that well. There is no evidence connecting it with this case of sickness, but that is not a very safe well to drink from, and might be liable to be infected if any infectious disease should pass through on that railroad. The character of the soil and its relations to the well-water used for drinking purposes in Pinconning, render it very important that there should be thorough disinfection of all infectious discharges thrown into privies or upon the surface of the earth. The officers and members of the local board of health told me they were in the habit of thoroughly disinfecting privies every spring. I urged upon them the importance of doing this with especial thoroughness this spring, and also the importance of prompt disinfection of the privy and surroundings at the residence of the patient whom I went to visit.

HENRY B. BAKER, M. D.

STATE BOARD OF HEALTH,
LANSING, MICHIGAN.

A FACTOR IN THE PRODUCTION OF RENAL DISEASE.

Observation of several cases has led the writer to think that a very common cause of renal disease is the long-continued and unadvised use of diuretics in the shape of patent medicines, warranted specifics in all renal disorders, with as much testimony to that effect as any one could ask for.

One has the backache, scanty and highly colored urine—the result of dietetic excess. He consults his physician, who advises greater moderation in the matter of eating and drinking, and stricter observance of hygiene generally. The advice he supplements with a little medicine to aid digestion. The advice is somewhat distasteful, the medicine not productive of the immediate and striking results for which the laity so much hunger. He meets with a friend, and pours out his complaints—the physician coming in for a share of the criticism. The friend instantly recommends Somebody's Sure Kidney Cure; he has taken it, and is greatly helped.

The invalid straight way accepts this wise suggestion, purchases a bottle, and commences to urinate liberally. The backache disappears, he is delighted, and the wisdom of physicians is as zero in his estimation. While his enthusiasm is still at white heat, he recommends all of his relatives and friends to take the S. K. C. and live to a green old age. But alas! in a short time his old enemy returns, and is a little more obstinate of expulsion than before, and, in fact, it takes two or three bottles to abolish the backache and bring the red urine to the orthodox straw-color. Soon his domicile has the appearance of a country drug store, and yet he is not well. The fact is, he now discovers that he is puffy about the eyes, his ankles are "bloated," he is short of breath, feels bad generally, and concludes, after some reflection and a prolonged trial of the S. K. C., that he will consult a physician—not the one that first prescribed for him, however, for his medicine did no good. The physician tells him what the test-tube and the microscope reveal, and the blank stare has a grave and eternity at the vanishing point of its perspective—but till his last gasp, he will say that Somebody's Sure Kidney Cure did him more good than all the doctors and all their medicine.

Diuretics act in one of two ways: They either increase systemic blood-pressure, or they act locally upon the renal cells and tubules. Act how they may, they, to a certain extent, congest. Congestion may beget inflammation; inflammation, alteration of tissue structure. In the above case, the kidneys were overworked, hence the backache and the loaded urine. The physician proposed rest for them; but instead they were spurred and scourged until they could do no more, then the old conduits overflowed, the cellular tissue was saturated, heart and lungs oppressed and the nervous system stricken down by the poison of excrementitious matter.

Should the future etiology of renal diseases confirm the above suggestion, might not such confirmation afford an excellent reason for the boards of health to strike down the infamous patent medicine traffic in all its branches?

JOHN N. TAYLOR, M. D.

A CASE OF CRANIOTOMY.

Last February I was called to a young Turkish woman, in her first confinement. I found a Turkish midwife in attendance, a relative of hers, who told me the patient had suffered pains three days and three nights; that the day previous she had severe hemorrhage, which had left her well-nigh exsanguinous.

Her flooding had now ceased. I found the case one of shoulder presentation. The arm of the dead child had depended from the vagina six or eight hours, as stated by the ignorant and superstitious midwife.

At this stage, I perceived at once that turning, if, possible, would be a hazardous operation, so I proceeded immediately to extract the child by evisceration.

As there was no uterine contractions, ergotin was given freely, after delivery, and the hand was kept constantly upon the uterus, to exert constant and continued pressure, otherwise the hemorrhage would have been uncontrollable.

As soon as expedient, and before leaving the patient, I gave injections of luke-warm water.

For a few days, I continued the injections, with the addition of a little acid phénique. The patient has not presented one untoward symptom, and to-day is in her usual health, with the exception of debility from the excessive loss of blood.

I would mention that DR. JOHN BASSIAN gave invaluable assistance during the operation.

I am acquainted with physicians, graduates of regular schools, who, in the above instance, would most certainly have delivered by version, and thus sacrificed the woman to what may be called malpractice — for all similar cases coming under my observation, when thus delivered, have invariably ended fatally.

MRS. MARY L. W. BASSIAN, M. D.

BROUSSA, TURKEY.

CHARCOAL INJECTIONS.

I see in the AGE of March 10th, page 120, an article on injections of charcoal water in typhoid fever as a method of disinfecting the offensive stools, and diminishing meteorism. I have found such injections advantageous not only in typhoid fever, but in enterocolitis and all other diseases were we have an accumulation of gas and a breaking down of the mucous coat of the gut. I think an advantageous addition to the charcoal water is white turpentine, fifteen minims to ʒi to each injection. I also give charcoal by mouth to control fœtid breath and accumulation of gas in stomach and upper bowels.

I. K. N. MILLER, M. D.

MOUND CITY, MO.

The break-down of several members of PRESIDENT CLEVELAND'S cabinet is attributed by those who are familiar with the habits of the gentlemen, to deficient muscular exercise quite as much as to excessive brain-work. The President himself is said to have added to his avoirdupois some forty pounds since he went to Washington. Unquestionably the surcharging of the system with the carbonaceous matter which abounds in the rich food for which Washington is noted, and the retention of the waste products due to deficient exercise, severely tax the resisting power of our Solons. We have received cuts and description of a Home Gymnasium Apparatus, devised by MR. JOHN E. REUBSAMS, of Washington, which seems to be a something which it would pay the President to introduce into the White House for his own use and that of his cabinet officers. MR. REUBSAMS also provides a muscle beater which has in it the possibility of much good to those whom either indolence or lack of time prevents from taking necessary active exercise.

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Editorial.

HYDROPHOBIA AND HOANG-NAN.

The more recent efforts of PASTEUR in the direction of the prophylaxis of hydrophobia, may vest the following letter from BARTHELEMY, of Nantes, (Bulletin Général de Thérapeutiqus, Feb. 28, 1886,) to DUJARDIN-BEAUMETZ, with more than usual interest: Since my essay on hoang-nan, which you had the kindness to reproduce in your excellent journal in August, 1881, and since the article on hoang-nan, published also in the Bulletin Général de Thérapeutique in October, 1883, I have continued to experiment with hoang-nan in private as well as hospital practice. The results which I have obtained have only tended to confirm the views which I have from the beginning expressed on the nature and properties of this medicament. I have obtained marked effects in many cases of dyspepsia, chlorosis, paralysis and in some cutaneous affections.

Allow me to submit to you to-day, that which refers to the use of this remedy in the treatment of hydrophobia. I have had occasion only once to administer hoang-nan against rabies that had reached the hydrophobic stage, with reflex spasms. The patient, a female, had been badly bitten in the face by a dog. The remedy seemed to ease this unhappy patient, but it did not prevent a fatal termination. I was not even able to note any physiological effect, in spite of 70 centigrammes of the powder and 30 centigrammes of the extract having been given inside of 24 hours. This non-result of a reaction may be explained by the too long delayed employment of the remedy, and by the administration of fractional doses at too long intervals. In Tonquin, in cases of declared hydrophobia or of the bites of venomous serpents, there is no hesitancy in taking much larger doses and in more frequent succession, it being held necessary to obtain the full physiological action of the drug in order to obtain on its therapeutic effect.

Twenty-four persons, bitten by rabid dogs, have been subjected to preventive treatment by hoang-nan, either under my own direction

or under the surveillance of several physicians of nantes or of the department, principally of Dr. Viaud-Grand-Marais, Professor at the School of Medicine, to whom we were already indebted for several remarkable works on serpents and their poisons.

The first case occurred in the month of March, 1882; the last in the month of April, 1885. Ten times, to my knowledge, the wounds were inflicted on the hands; once on hands and face. General cauterization was either completely omitted or practiced several hours or days after the accident, or cauterization was applied with such comparatively feeble agents as as aqua ammonia, or a solution of carbolic acid. Two of the individuals whose cases I have carefully watched—a man of 30 years and a young man of sixteen—have presented signs of rabies, persistent insomnia, restlessness, nightly agitation, desire to move, hallucinations, barking, etc. None of these persons, however, really had hydrophobia; none have succumbed up to date, in spite of the quite justifiable fears of their nurses.

The duration of the preventive treatment has, on an average, been 12 days, and the total quantity of powdered hoang-nan given during this time has varied from six to eight grammes.

It has scarcely been necessary to exceed a dose of one gramme per day to obtain the physiological effects, viz: exageration of reflex movements, cramps, stiffness and slight trismus. Besides, the maximum dose was only gradually reached, and in some cases we have adopted progressively decreasing doses in order not to avoid the too sudden discontinuance of the remedy.

I may add that M. Lesserteur alone, prior to 1884, furnished hoang-nan for more than 100 persons that had been bitten by venomous animals, and that no fatal results were observed.

Clinical facts cannot have the demonstrative force of experiments in the laboratory. They do not compensate for the uncertainty, except through their number. The series of facts which I have stated does not, therefore, appear to me to establish rigorously the rôle which hoang-nan will play in the treatment of hydrophobia, but it seems to me sufficiently encouraging to call for further trials.

If I were to draw an absolute conclusion, I would say that hyprophobia is either less frequently communicated to the human race than we generally admit, or hoang-nan, progressively administered up to its physiological effects during the period of incubation, modifies with sufficient efficacy the nervous system and the entire economy to prevent an evolution of the rabietic virus.

Dickens: There is nothing so strong and safe in any emergency in life as the simple truth.

THERAPEUTIC ACTION OF ALVELOZ MILK.

Dr. Landowski contributes to the Bulletin Général de Thérapeutique, of February 15th, an account of his experience with alveloz milk.

Alveloz was discovered in Goazimo (Bahia) in 1875, and was described by Buhler under the name of Euphorbia Heterodoxa. The plant grows in abundance in the north of Brazil, and its juice has for a long time been employed by the natives in the treatment of ulcers of a malignant character. On the advice of a peasant, an official of Pernambuco tried the remedy in a case of malignant growth on the face. The result was so satisfactory that he communicated it to several physicians in his locality, upon which Dr. Alcibiades Velloso, a very distinguished physician of Pernambuco, began a careful study of the substance, and it is to his observations that we owe the introduction of alveloz milk into therapeutics.

Dr. Landowski believes himself to have been the first in Europe to have experimented with the juice of the euphorbia heterodoxa, and during the last year he communicated to the Congress at Grenoble the first results of his experience. The juice of which he speaks is, while fresh, of the aspect and consistence of milk. It must be carefully kept in a corked vial, because when exposed to the air it becomes clotty and loses its action. Its local action is very energetic, and it must be employed with very great care, for a very thin layer upon the denuded epidermis suffices to provoke a considerable slough. It is this very property that makes it valuable. For it is very easy to acquire the necessary skill in the employment of the required quantity to reach desired results. Dr. L. had occasion to use the alveloz milk in a case of limited epithelioma of the neck. The success surpassed his expectations. After six applications by means of a camel's-hair brush, the neoplasm was destroyed, and the sore presented a most satisfactory appearance. The action of the milk is, of course, only local, no influence being exerted on the diathesis. In a case of cancroid of the face, the destruction was complete and a cure resulted. In several other cases, notably for the destruction of the syphilitic eruption, the action was all that could be desired.

Unfortunately several applications subsequently made did not give equally satisfactory results. Several of the doctor's associates, to whom he had given a small quantity of the milk, shared in this disappointment. They were very well satisfied with the remedy at first, but after some time its activity was exhausted. These negative results were, doubtless, attributable to the deterioration of the substance, which had coagulated and had become generally discolored.

M. De Santa Cruz has attempted to remedy

this obstacle to the use of the alveloz milk by endeavoring to obtain the active principle. By treating the juice with water, and, later on, with absolute alcohol, he has isolated a resinous substance of a whitish color, which he reports as very caustic and completely stable.

Dr. Landowski closes his paper with the fellowing conclusins:

1st. The preparation merits very careful investigation. It certainly unites to a very powerful escharotic action, the property of dissolving organic tissue, and its action may be compared to that of a powerful caustic increased by the action of papaine.

2d. The destruction of pathological tissue goes on promptly under its use, and can be graduated, so to speak, by successive applications. The juice in question can, therefore, be employed in cases where for any reason the bistouri must be avoided.

3d. The application of the remedy is very easy, for it is sufficient to made application with a camel's-hair brush in order to obtain the powerful destructive effects. The wound is then dressed either with a solution of corrosive sublimate, 1:2000, or with borated vaseline.

4th. In order to obtain the desired results the juice must be fresh, for it loses its properties rapidly.

THE ETHICS OF THE DOSE.

The N. Y. Medical Times is the exponent of what may be called advanced homœopathy. While holding to the more general applicability of the law of similars as a guide to therapeutics, it has no sympathy with the high dilutionists, who, with considerable consistency in their claim, insist that they are the only true disciples of Hahnemann. Our contemporary, touching on the question of dose in a recent issue, fitly says it has been a most disturbing element in the profession of ethics for nearly a century now, and the discussion waxes warm in certain quarters at present, in consequence of the disaffection of another prominent high dilutionist who has been forced to change his mode of practice to accord with the test of experience and with scientific investigation. The circle of adherents of this visionary delusion is gradually narrowing, so that it will soon die from inanition, as it obtains few converts.

If the public only knew just how these so-called "high dilutions" are made, we doubt whether they would be tolerated for a moment.

Describe to any intelligent layman that the first dilution contains one part of medicine to ninety-nine of the vehicle, that the second dilution contains one part of the first to ninety-nine of the vehicle, that the third dilution contains one part of the second to ninety-nine of the vehicle, and so on to the thirtieth, two hundredth, or the hundred thousandth; that so-called fluxion dilutions are made by washing out the bottle in which there has been medicine a hundred thousand times, more or less, and labeling the remainder the "hundred thousandth," or whatever the water meter may indicate, and see if he will be willing to trust a valued life to such mystical measures.

In most cases it would be only necessary to describe this process to stamp out any tendency to a belief in such transcendentalism.

Such so-called medicaments have never been known to make any well person sick, and it is fair to presume that they have no power to make sick persons well.

There is much of what is called clinical experience which is purely fictitious and not worthy of any credence whatever.

Scientific progress indicates beyond reasonable doubt that the selection of the dose is an important factor in the practice of medicine, and that the agent employed must be capable of doing just what is required. It must be neither too powerful, and hence injurious, or not powerful enough, thereby failing to produce any effect.

It is to ascertain this means that the conscientious physician will ever strive, and if he avoids fiction and accepts only demonstrable facts, he is much less likely to become entangled in the ethics of the dose.

FORCIBLE DILATATION OF THE CERVIX UTERI.

Dr. Goodell, of the University of Pennsylvania, discountenances Sims' operation of slitting the cervix for the relief of dysmenorrhœa, declaring it not only apt to be followed by peritonitis, but of doubtful efficacy as a means to the end. He would substitute forcible dilatation to it, holding it to be a most efficient mode of removing the obstruction due to flexion, or stenosis, and one attended by the minimum of danger. In three hundred and fifty performances of the operation he has not met with a single death. The instruments which he employs are two Ellinger dilators with parallel blades, by means of which the entire canal may be uniformly dilated. To prevent injury to the fundus the blades should be armed with a beak two inches from the point. The patient being fully anæsthetized, and a suppository containing one grain of aqueous extract of opium placed in her rectum, her hips are drawn to the edge of the bed, each knee being supported by an assistant. A bivalve speculum having been introduced, the vagina is washed out with an antiseptic lotion. The cervix being

steadied with a tenaculum, the smaller dilator is carefully introduced, when the handles are slowly brought together. The blades thus fully separated are allowed to remain for two minutes, when the instrument is withdrawn and the larger dilator introduced. After its blades have been opened to the extent of an inch and a quarter, the instrument is allowed to remain for about fifteen minutes, when the anæsthetic is withdrawn. If the flexion be very pronounced the instrument should be withdrawn and re-introduced with reversed curve. The time best suited for the operation is midway between the menstrual epochs. The only precautions necessary against inflammation are rest in the recumbent position, and the use of the rectal suppository.

THE PHILOSOPHY OF VACCINATION.

Prof. Tyndall explains the philosophy of vaccination as follows: When a tree or a bundle of wheat or barley straw is burned, a certain amount of mineral matter remains in the ashes—extremely small in comparison with the bulk of the tree or of the straw, but absolutely essential to its growth. In a soil lacking or exhausted of, the necessary constituents, the tree cannot live, the crop cannot grow. Now, contagia are living things, which demand certain elements of life, just as inexorably as trees or wheat or barley; and it is not difficult to see that a crop of a given parasite may so far use up a constituent existing in small quanties in the body, but essential to the growth of the parasite, as to render the body unfit for the production of a second crop. The soil is exhausted, and until the lost constituent is restored, the body is protected from any further attack from the same disorder. Such an explanation of non-recurrent diseases naturally presents itself to a thorough believer in the germ theory; and such was the solution which, in reply to a question, Prof. T. ventured to offer nearly fifteen years ago to an eminent physician. To exhaust a soil, however, a parasite less vigorous and destructive than the really virulent one may suffice; and if, after having, by means of a feebler organism, exhausted the soil without fatal result, the most highly virulent parasite be introduced into the system, it will prove powerless. This, in the language of the germ theory, is the whole secret of vaccination.

TEREBENE.

Dr. H. J. Turner, of Wayland, Mich., asks for the formula for preparing terebene. To prepare terebene, rectified oil of turpentine is mixed cautiously with one-twentieth of its weight of sulphuric acid, the mixture shaken repeatedly, and left to stand twenty-four hours. The clear liquid is then decanted from the sediment and rectified by distillation. This process must be repeated until the product has a constant boiling point of 156° C. (313° F.) and no longer rotates the polarized ray. It is finally washed with water and carbonate of sodium, deprived of adhering moisture by fused calcium chloride, and redistilled. It will be seen from this account of the process that it can be best prepared by the manufacturing chemist, and it is in fact already furnished by several of the manufacturers.

Notes.

The first annual commencement of the Detroit College of Medicine (the combination of the Detroit Medical College and the Michigan College of Medicine) was held at the Opera House on the afternoon of the 23rd ult.—too late for notice in our last. The addresses were delivered by Dr. A. E. Carrier and John G. Hawley, Esq., and the degree of the College was conferred on the forty-seven young men who had successfully passed the ordeal of the final examination. The class is said to be the most intelligent ever graduated from a Detroit medical college. The last class, by the way, is always the best, which fact but goes to show that the cause of medical education is steadily advancing. In the evening the faculty, alumni, students and invited guests participated in a banquet at Harmonie Hall, where the necessary comestibles to a good feast, and the choicest brands of coffee and cigars (nothing stronger) were supplied in necessary abundance. Under the stimulus of the occasion a flood of eloquence broke loose, and at the close the affair was generally conceded to have been a success.

We acknowledge, with thanks, a clipping from the advertising department of "Grip," a newspaper published in Toronto, containing a report by S. Edward McCully, M. D., of the case reported by that gentleman in the Age of February 10th. It is, of course, impossible for an editor to be familiar with the professional standing of all who send him communications, and his only guide, in most instances, is such internal evidence of such standing as may be furnished by the communication itself. This is not always reliable, and, consequently, he is very liable to imposition. We are always thankful to our friends when they point out wherein we have been made the victim of misplaced confidence.

The number of accidents treated in the hospitals of the Missouri Pacific system of railways during a single year, is said to exceed a hundred thousand. The system employs one

hundred and forty-nine surgeons, and with a view to utilizing the observations of these men in their extensive field, the Weekly Medical Review has opened a department devoted to Railway Surgery.

Mitchell, Dakota, is said to be pregnant with a medical journal, which is apparently at the end of its gestation. The parturition will lift this western town from the obscurity which has heretofore compassed it about. The name selected for the coming offspring is the Dakota Medical Brief. It will, of course, fill the usual long-felt want. We will welcome it with the usual open arms to our brilliant galaxy.

There is an old adage to the effect that one must go away from home to learn the news. As an illustration, we learn from the Cincinnati Lancet and Clinic, that there is a dentist in Michigan, called SMITH, the sign over whose shop door reads: "Teeth Extracted Without Enny Pane. Laffin Gas Ten (10) cents a Ha Ha!"

A correspondent of a southern paper asserts as a solemn fact, that the women of the south grow stout from chewing gum. He suggests, as a remedy for the thinness and gauntness of the males of the same latitude, that they throw tobacco to the dogs and take to gum.

DR. AUSTIN FLINT bequeathed his library to the New York Academy of Medicine, thus setting an example which it is hoped will be emulated by contemporaries in the sere and yellow leaf elsewhere.

Medical Progress.

VIBURNUM PRUNIFOLIUM IN ABORTION.—By A. D. LEITP NAPIER, M. D., Vice-president of the Edinburgh Obstetrical Society; and Examiner in Midwifery, at University of Aberdeen.—With reference to DR. MACFIE CAMPBELL'S communication regarding the treatment of abortion, in the Journal for February 17, I wish to corroborate his observations, and, at the same time, to take exception to certain inferences contained in his paper.

I have prescribed viburnum prunifolium for fully three years. I fancy I was among the first to use it hereabouts, as, when prescribed, it could not be obtained without considerable delay in Edinburgh. Being dissatisfied with the results of other preventative treatments in some cases, and reading LUSK'S recommendation (Science and Art of Midwifery, second edition, p, 301), in which he refers to JENKS' paper in the Transactions of the American Gynæcological Society, I gave the drug a trial, and have since used it repeatedly. In one case of so-called "habitual abortion" it failed to do good. This lady had one healthy child, then five abortions, or premature labors, at different periods; then a child born living at five months and a half, which died. She was then treated with chlorate of potash and iodide of mercury, with iron alternately, and was delivered in six months and fourteen days of a very feeble living child, now a fine healthy boy, six years old.

Next time, when pregnant, she was ordered viburnum, but aborted at the third month. She was again pregnant, was treated with viburnum, and aborted at the second month. Possibly there was a specific element in this case, judging from the one successful pregnancy; but I have not been able to establish it.

Another patient aborted twice after marriage; when pregnant for the third time, she was treated with chlorate of potash, and delivered, at term, of a healthy child. She next aborted at the second month, in spite of viburnum. Abortion was again threatened about four months ago, but passed off after taking viburnum; and she is now fully six months pregnant. A third case had recurrent monthly uterine contractions from the second to the seventh month. Small clots and quantities of blood passed several times. In this case, bromides, in combination with nepenthe, were found more effectual than viburnum, but markedly so when given in combination with nepenthe and belladonna. I might adduce many more such cases in the same strain. On the whole, my impression is distinctly in favor of the drug; yet, I cannot believe it to be in every case "a sure arrester of uterine action."

With all courtesy, I must demur to the method in which DR. CAMPBELL'S cases are recorded. Brevity excuses much, but accuracy is at times sacrificed thereby. In the first place, it is surely necessary to show that abortion was actually threatened ere we write of its arrest. Do uterine contractions never occur without separation of the decidua, or death of the fœtus? Do not very many women suffer severely from pains at each monthly period, and, in many cases, carry to term without any drug? What is meant by the os dilating? Case 1, in which abortion occurred, is the only case, except 2, where the os is referred to; in case 1, "it continued to dilate." Now, dilatation of the os, unless it be the internal os that is meant, is by no means uncommon without abortion following. SCANZONI has recorded a case, now classical, in which not only was ordinary treatment employed, but the introduction of a sound and intra-uterine injection failed to bring about "the inevitable abortion." I have mentioned cases with a somewhat similar history. (Transactions of the Edinburgh Obstetrical Society, vol. ix, page 109.)

Nor do "breaking of the waters" or hæmorrhages invariably end in abortion. The "flow of the waters" may be due to very active glandular secretions from the cervix; or even to the formation of, and rupture of amnio-chorial pouches, the "false bags of membranes." We often meet with the latter occurrence, one or two months before the termination of normal pregnancies. In early pregnancies I have also noted this, and observed that the pregnancy went smoothly on. Probably the fœtal sac has need of more room, or there is hydramnion in such cases. Hæmorrhages are too often regarded as causing miscarriage; if from the interior of the uterus, they are more likely (from disease of the membranes or death of the fœtus)

the consequence than the cause; if from the cervix, there is in early pregnancy no necessary disturbance of the uterine contents. Abortion may come on in these cases, as has been pointed out by BARNES (Obstet. Med. and Surg., vol. ii, p. 232), in consequence of the law, "when hæmorrhage sets in from any given point, there quickly follows an attraction of blood towards the point of escape."

Given, a healthy uterus and a healthy fœtus, it is extremely difficult to dislodge the latter, except at a monthly period. Some women abort on the slightest provocation, although seemingly healthy. Others, as I have known, may undergo the most extraordinary exertions, jump high gates, dance, or run without inconvenience. Thus, in estimating the value of any drug as an arrester of uterine action, many side issues need consideration. At the same time, given, more especially in primiparæ, a gaping os with some part of the ovum protruding, attended by rhythmical uterine contractions and hæmorrhage, then, if viburnum, or anything else, arrest the progress of abortion, it is well that the profession should know it. Even with hæmorrhage and a patent os, if we cannot feel the ovum, and the pains be irregular, while miscarriage is likely, it is by no means certain. I have seen, as must everyone with experience, many cases "settle" under most diverse treatment—sedatives, for example, opium or chloral; astringents, as gallic acid, or acetate of lead, or, perhaps better than these, hamamelis; vascular sedatives, as bromides, digitalis, antimony, or viburnum.

In typical abortion, the ovum is separated from the uterus, and hæmorrhage follows; it may have caused the separation; the internal os is first dilated, then the cervix, and lastly the os externum. Now, can viburnum be depended on after such a process has begun? I think we must rather regard it as a preventive drug in "habitual" abortion, if given with a view to regular uterine action, than as an arrester of the immediate cause of abortion. In my own practice, I have experienced doubt when to prefer it to chlorate of potash; I have combined the drugs in some cases with good effect. In cases where we expect constitutional affection, I prefer mercury and iron, given together, so that the former drug, while exercising its special influence, may not unduly affect the red blood-corpuscles. Iron has been looked on as an abortifacient; my experience contradicts this.

As an example of the benefits of other means than viburnum, I may mention that, ten years ago, I succeeded in bringing a pregnancy to a successful termination at full time after ten successive miscarriages.—*British Med. Journal*, March 13, 1886.

THE USES OF DIGITALIS.—Digitalis has two marked properties: it is a heart tonic and diuretic. It seems to exercise more control over the circulatory than the nervous system. Next to the preparations of opium and cinchona, I have given it to patients more frequently than any medicine, and the result of my observations for twenty-five years is that digitalis acts slowly, too much so to conclude that it directly affects the nervous system. Another conclusion I have arrived at is, that it is not a cumulative medicine, in the ordinary sense of that term. Our own DR. ODLIN holds the same opinion. On account of its slow solubility in the blood, it may appear to accumulate when too rapidly administered. An interval of six or eight hours should be allowed between doses. In some patients it produced diarrhœa.

In medicinal doses, digitalis steadies the heart's action, lessens the number of beats, allowes the coronary arteries to supply nourishment to the enfeebled organ (which is only possible during the diastole), and contracts the arterioles all over the body. In poisonous doses, it seems to tetanize the heart, at last totally arresting its movements. Experiments on the lower animals and a few post-mortem examinations in man show that the left ventricle is always empty and rigidly contracted after death caused by poisonous quantities.

The following is a list of the more important diseases in which digitalis has been given advantageously:

1. In mitral obstruction, and generally whenever effusion occurs from debility. When dropsy supervenes from heart disease, when the face is dusky, the jugular veins distended, the breathing hurried, and the pulse feeble and intermittent—small doses of digitalis, aided by position and stimulants, will often work wonders. In some cases, where the left ventricle is both dilated and hypertrophied, it may be given tentatively.

2. After rheumatic fever, when the pulse is feeble, rapid and irregular, combined with salicylate of soda. It is also useful in the later stages of typhoid fever. In moderate doses it reduces the temperature in all fevers.

3. In atonic uterine hemorrhage, and as a hemostatic after surgical operations on the uterus, it may be alternated with ergot. In giving digitalis it not unfrequently occurs that the pulse is accelerated at first for a few hours, although the final effect is to reduce the number of pulsations.

4. In delirium tremens. Very large doses have been given very successfully in this affection. I recollect attending a case in Scotland, many years ago, assisted by my tutor, where we gave tincture of digitalis in half-ounce doses, after a fair and futile trial of opium, and the patient recovered. He was a regular toper, full of morbid fancies, and he would only consent to swallow the medicine on condition that I scratched his back, during which interesting process he fell asleep. I remember that DR. GLEN was in doubt whether it was the digitalis or the scratching that saved him.

5. DRS. NELLIGAN and CORRIGAN, of Dublin, strongly recommended it in epilepsy. They gave two ounces of the infusion at bedtime, continued for four nights, with an interval of two nights, then repeated as before. My experience of its use in this affection is not extensive, and not very favorable.

6. In spermatorrhœa it occasionally proves beneficial. The influence of digitalis on sexual desire, in both sexes, is decidedly sedative and anaphrodisiac. It only exerts this influence, however, after the lapse of weeks.

7. In bleeding piles. A good form for this disease is the powder made into pills with tar, each pill containing one grain of digitalis. Four may be swallowed daily.

8. In maniacal cerebral excitement the hot infusion, sweetened, in teaspoonful doses, twice a day or oftener, sometimes answers the pur-

pose of quieting the patient better than the bromides.

To return to digitalis. In all cases great care must be taken to watch the effect of the medicine. It is better to begin with small doses, observing the results from day to day. When we have reason to suspect fatty degeneration of the heart, it should not be given. In ossification of the aortic valves and in croupous pneumonia, digitalis is likely to do more harm than good. As a general rule, it is not serviceable in robust patients; and it only acts as a diuretic during the presence of dropsical fluid. The dose should be diminished as soon as the amount of urine secreted becomes less. The main benefit derived from digitalis seems to be the relief of irregular pulsation by imparting tone to the heart and arteries. Like opium, its first effect is stimulating, its second effect is sedative.—*Louisville Medical News.*

THE LATER ADVANCES IN THE THERAPEUTICS OF SKIN DISEASES.—In a practical paper UNNA gives (Medicinisch-Chirurgischer Centralblatt, Wien, October 30, Nov. 27, 1885) a résumé of the progress made in cutaneous therapeutics during later years. Among the various remedies brought forward, and which have apparently established claims to permanency, may be mentioned salicylic acid, the ichthyol preparations, calx sulphurata, resorcin, and cocaine.

Salicylic acid is especially valuable for its action in removing the normal or thickened horny layer, and for this purpose is best applied in the form of a plaster (salicylpflastermull, 5.0, 10.0, 20.0—50.0 gr. pro Rolle). Thickened, infiltrated patches of eczema, psoriasis patches, and lupus infiltration will yield much more readily to the ordinary remedies, if the corneous layer of the epidermis is first acted upon by a salicylic acid plaster. This remedy has the advantage of confining its action to the horny layer alone, and hence there is no danger of producing vesiculation or bullæ, as will sometimes happen when corrosive sublimate and similar drugs are employed. The action of the acid is not corrosive, but the "salicylated" corneous layer is usually cast off as a soft, whitish membrane. In addition to this action of salicylic acid, it sometimes has a favorable effect, if continuously applied, in reducing infiltration, such as lupus deposits, etc. An advantage which the drug also possesses is its compatibility with ordinary remedies, with the exception of alkalies and soaps.

The value of sulpho-ichthyol-ammonium lies in its high proportion of sulphur, its ready solubility in water, and its harmlessness. It has a favorable effect in pityriasis, seborrhœa sicca, ichthyosis, and also in the desquamation following acute exanthemata. In mild cases of psoriasis, also, its action is recognized. While the ordinary sulphur preparations must in eczema always be prescribed with caution, this compound may be added (in the proportion of about two per cent.) to the usual applications in this disease, always without fear of aggravating the disease, and almost invariably with good effect. The influence of the remedy, especially when given internally (for adults, fifteen grains daily; for children, three to seven grains), is seen in eczemas of nervous origin. The principal claim of the ichthyol salts, however, is their action, when applied locally, in acne and acne rosacea.

Calx sulphurata is valuable in interstitial suppuration, especially if given in the beginning. The dose varies from one-fifteenth to one-sixth of a grain, three or four times daily.

Resorcin has a recognized antiseptic value, and has proven useful in those diseases for which the ichthyol salts have been mentioned. Its lack of odor gives it some superiority over the latter preparations. It is not so harmless, however, and hence in universal and chronic skin diseases its use requires caution. It is especially valuable in those cases of eczema occurring about the eyelids, lips, and nasal orifices. It is applied as a ten- to thirty-per-cent. salve or muslin plaster (Salbenmull).

Cocaine proves valuable in the form of a one-per-cent. solution or salve, in eczematous fissures of the anus and nipples; it should be applied frequently.

As regards the advance in the treatment of individual diseases, it may be said of lupus, that so far nothing has proven so useful as the curette, thoroughly employed, and followed by a caustic application. The diseased areas are to be scraped out, and then a caustic, such as nitrate of silver, chloride of zinc, etc., be carefully applied; or, better, the application of a concentrated solution of pyrogallic acid. Or pencilling the part with a pure ichthyol salt two or three times daily, may be employed. If more active cauterization is required, application ofa ten- to twenty-per-cent. pyrogallic acid salve may be used. For deeper cauterization muslin plasters of arsenic and mercury, pyrogallic acid, salicylic acid, salicylic acid and mercury, iodoform, salicylic acid and iodoform, iodide of lead, mercury, and carbolic acid. These plasters are applied to the scraped-out areas. If the curette is objected to, or for any other reason cannot be used, then the best method consists of the application of a strong salicylic acid plaster to act upon the horny layer of the epidermis, to be followed by one or more of the above-named plasters, until cure has taken place. Punctate and linear scarifications are not advised for the reason of the possibility of constitutional infection. The combined method of punctate scarification and injection of an antiseptic, however, is not, for known reasons, open to the same danger. Among the remedies which may be injected may be mentioned a fifty-per-cent. solution of ichthyol, with or without the addition of tincture of iodine; a ten-per-cent. solution of pyrogallic acid; a two- to five-per-cent. solution of potash; and a five-per-cent. solution of creasote.

In regard to the treatment of furuncles, carbuncles, abscesses, etc., an experience of five years has taught the writer that early treatment will frequently abort the process; or at all events have a remarkably favorable influence. The remedy which gave these results is the mercury and carbolic acid muslin-plaster. The application, in addition to the favorable effects mentioned, has a marked influence on the pain. In those cases where pus collects beneath the plaster, the latter is removed, the pus allowed to dry, and the same or a new plaster applied. If convenient, a linseed poultice may be put on over the plaster. The practice of incising furuncles and carbuncles has, with rare exception, no advantages. On

hairy regions, or where the plaster cannot be conveniently applied, the author recommends the application, twice daily, of a ten per cent. ichthyol salve. The best remedy for internal use in these affections is calx sulphurata, in doses of about a sixth of a grain, three times a daily.

In erysipelas, applications of pyrogallic acid, resorcin, and the ichthyol salts are useful. They are applied in the form of ointments or plasters—the ichthyol salts, 20 to 50 per cent. strength; resorcin, 10 to 20 per cent.; pyrogallic acid, 5 per cent.—*Amer. Jour. Med. Sciences.*

Medication of Diabetes Mellitus.—We notice in the St. Petersburger Medicinische Wochenschrift an abstract of a valuable paper by Otto Dornblueth, of Rostock, on the theory and practice of the medication of diabetes.

Dornblueth watched in four cases of diabetes the influence first of a strict antidiabetic dietary regime, and in second order the influence upon the excretion of the sugar of several medicines, such as salicylate of soda, iodoform, carbolic acid, and salicin.

The result in all the cases was that the iodoform had no influence at all upon the quantity of glucose and, correspondingly, did not improve the general condition. The other remedies, however, exercised a decided beneficial influence on the diabetic symptoms. It was shown positively that the excretion of glucose was markedly diminished, yea, entirely checked, after a previous dietary alone had not proven efficient. Further, it was shown that the increased elimination that follows the consumption of amylaceous food is compensated, to a certain degree, by administering the drugs mentioned, together with such food. Again, the influence of the medication became manifest in an increase of weight, strength and improved subjective sensations. No cure is reported, merely a positive amelioration.

As regards the value of the several agents, we learn that the carbolic acid is not so reliable in its effects, and its toxic influence is to be feared in the large doses (one-half gram three times a day) that were necessary in some instances to obtain a marked influence.

The salicylate of soda and the salicin rank together as far as effectiveness is concerned. But the salicylate shows drawbacks in that the salicylic acid causes violent headache and tinnitus aurium, and even hemorrhage in the inner ear. The soda-salt is soon rejected by the stomach, large doses being necessary in grave cases.

The salicin does not upset the digestion; the intensely bitter taste is not complained of, while the sweetish taste of the salicylate disgusts the patients. Although the febrifuge influence of salicin is supposed to be due to its conversion into salicylic acid in the economy, and this might cause us to look for the signs of intoxication that follow the use of the salicylic acid as such, or as a salt still single doses of three to eight grams and diurnal quantities as high as eighteen grams were well borne.

Dornblueth is of the opinion that a dietary alone is not sufficient in the treatment of diabetes. In the first place there are patients that cannot exist on an exclusive animal diet. Digestive disturbance often arises and such an exclusive diet is said to cause fatal acetonemia. The compensating influence of the drugs permits the cautious use of some amylaceæ, which is quite a gratification to the sick.

The salicin is suggested in doses of three to six grams three times a day before meals. The glucose amounts should be watched and if a minimum is reached a daily ration of amylaceous or leguminous food may be allowed. It is only necessary to give one dose of salicin previous thereto, and no glucose will appear.—*Weekly Med. Review.*

Phthisis and its Treatment by Carbolic Acid.—Dr. Filleau (Revue de Thérapeutique, Feb. 1, 1886,) has just communicated to the Société Medico-pratique the facts of an original and efficacious treatment that has given him the best results in advanced consumption—the treatment by carbolic acid. The carbolic acid must be pure, and in white crystals. When it is impure it becomes colored little by little until it is reddish-brown. It then contains rosaline and rosacilic acid, which may be injurious by their coagulant action on albumen. He employs two methods for administering carbolic acid in the treatment of tuberculosis; the hypodermic and the stomachic. The process by hypodermic injections has distinct advantages.

The injections made with a solution of pure carbolic acid are inoffensive; they neither cause abscesses, phlegmons, nor even simple nodosities. They are little painful, and the patients never refuse them in any case.

The solution which he uses is this:

> Distilled water, 95 grammes;
> Glycerin, neutral, q. s.;
> Crystallized carbolic acid, 1 gramme.

The dose of carbolic acid can be administered without inconvenience up to two grammes (ʒ ss). These injections are made in a quantity of a hundred drops, by means of a syringe holding five grammes; they can be given every two days, or three times a week, according to indications. He inserts the injections as near as possible *loco dolenti*, except in cases of very marked emaciation. For administration by the stomach, he has recourse to the neutral phenoglycerin, which is very well supported by the stomach, and which is prepared according to the following formula:

> Glycerin, neutral, 400 grammes;
> Crystallized carbolic acid, 2 grammes.

A teaspoonful contains fifteen centigrammes (about 2½ grains). The dose can be raised to four spoonfuls a day, according to the toleration. Dr. Filleau reports many fortunate cases, which permit him to come to the following conclusions:

The parasitic doctrine of tuberculosis being admitted, one is authorized to consider carbolic acid as the best antiseptic to employ against its manifestations. Carbolic acid is the only antiseptic which, up to the present time, can be administered hypodermatically in large doses during an unlimited time without causing accidents. The tolerance for and harmlessness of carbolic acid administered hypodermatically

are clearly demonstrated. Under the influence of this medication, the general state of the patient speedily improves. The local state is at the same time advantageously modified.

The treatment in all cases demands, on the part of the patient and of the physician, long persistence.—*Amer. Jour. of Med. Sciences.*

ADONIS VERNALIS AND ADONIDINE EMPLOYED AS CARDIAC REMEDIES.—Adonis vernalis is a plant of the family of ranunculaceæ, which grows in the northern hemisphere of the old continent. Its active principle, adonidine, was isolated in 1882, by Vincenzo Cervello, of Strassburg. It is a glucoside prepared from the leaves, which are macerated in a mixture of water and alcohol for six days. The liquid is then treated with basic acetate of lead, filtered and concentrated; then by the addition of tannin in alkaline solution, adonidine is separated. The tannate of adonidine is washed with water, decomposed by oxide of zinc in the presence of alcohol, which dissolves the adonidine, and by evaporation a product is obtained which is purified by repeated crystallizations in alcoholized ether.

Physiological effect.—The physiological action of adonidine shows itself at first by a slackening of the pulse, with elevation of arterial pressure, and finally by the augmentation of the frequency of the pulse. However, failure is frequently met with, and the cardiac mechanism has not been explained as yet.

Form of administration.—Adonis vernalis is given in a dose of from 4 to 8 grammes in the form of a potion formularized as follows: Adonis vernalis leaves, 6 grammes; infused in water, 150 grammes; orange flower syrup, 40 grammes. A teaspoonful to be taken during the space of two hours. The tannate of adonidine is also given in doses of from 2 to 5 grammes. Adonidine, however, gives better results than either of these preparations mentioned above. Its therapeutic action is more assured and constant. It is administered in doses of from two to three centigrammes in pilular form: Adonidine, 0.40 centigramme, excipient, 2 grammes; simple syrup, q. s. Divide into 20 granules, each containing 0.005 milligrammes of the active principle. These granules are given in doses varying from 4 to 6 during the space of three hours. An abundant diuresis is obtained. The pulse is regulated and the beating of the heart is strengthened.—*Repertoire de Pharmacie*, No. 2, Feb., 1886.

THE TREATMENT OF ANEURISM BY THE INTRODUCTION OF FILIFORM MATERIAL.—In the Medical News for December 12, 1885, we called attention to the subject of aneurisms of the aorta, and incidently to the treatment of aneurisms by the introduction of foreign substances. The occasion of this article was a case of aneurism of the abdominal aorta treated by LORETA, in 1884, by the introduction of about two yards of silvered copper wire, after opening the abdomen. A new instance of the introduction of wire for the treatment of aneurism has just occurred in London. On February 13, DR. CAYLEY reported to the Royal Medical and Chirurgical Society (British Medical Journal, Feb. 27, 1886) the case of a man forty-eight years old, with an aneurism of the ascending part of the arch of the aorta. After unsuccessful medicinal treatment, on June 24, 1885, MR. HULKE introduced into the sac, through a fine canula, forty feet of steel wire, which had been previously coiled on a mandril half an inch in diameter. This was followed by no untoward symptoms, and the upper portion of the aneurism was completely consolidated. About two months later, there were signs of the extension of the aneurism within the thorax, and on September 10th, MR. GOULD passed a canula down behind the sternum into the aneurism and introduced thirty-four feet nine inches of wire. This caused no constitutional disturbance, but it afforded no relief of the symptoms of aneurism, and the patient died in ten days. At the autopsy it was found that the upper part of the aneurism was completely filled with clot, in which the wire was embedded. The lower portion was not affected by the treatment. In the discussion which followed the report of this case MR. BARWELL spoke of this as the ninth reported case of the introduction of wire, horsehair, or catgut, none of the patients having been definitely cured. The general opinion seemed to be that such a measure must be regarded as a last resort. MR. HOLMES expressed an opinion similar to that which we expressed in our editorial of last year, in favor of the employment of a less rigid material than wire, instancing catgut and horsehair, of which he thought the latter the better.

The result of the case reported by DR. CAYLEY, we think, justifies the hope that something may yet be accomplished in the treatment of aneurisms which resist medicinal treatment, and which are not amenable to compression or ligation. Such cases certainly ought not to be left to die unrelieved, and by a judicious following up of the indications already accumulated the best method and best material for the obliteration of the cavity of the sac will, doubtless, be discovered. For the present, it seems to us that it would be well to repeat the use of the horse-hair, which—contrary to the apprehensions of LORETA and to the assertion of MR. HULKE—*can* be made absolutely aseptic. —*Medical News.*

ON THE EMPLOYMENT OF THE SALICYLATE OF LITHIUM IN THE TREATMENT OF RHEUMATISM.—In the treatment of acute rheumatism, as also in acute gout, the salicylate of lithium is quite as effective as the salicylate of sodium. In certain cases of acute articular rheumatism treated with the sodium salt, there comes a period, after rapid and considerable improvement, when the joints still remain somewhat painful, stiff, and swollen, notwithstanding the fact that the remedy is given in doses sufficient to cause toxic phenomena. Under these circumstances the salicylate of lithium will cause the last traces of the affection to disappear promptly. It is also more effective in the treatment of progressive subacute articular rheumatism. In patients attacked with this most tenacious and troublesome form of rheumatism, VULPIAN has employed, with the utmost perseverance, the most various medication, including large and repeated doses of the salicylate of sodium, without producing other than the most temporary and insignificant

amelioration; and yet he has seen the salicylate of lithium bring about notable improvement in ten to fifteen days. Four grammes (about 60 grains) a day is the quantity of salicylate of lithium usually required. The effects of the remedy begin to be manifest in a half to one hour, and consist in headache—which, however, disappears within a few hours—and vertigo and dullness of hearing, which are more persistent. In some subjects it also causes colic and diarrhœa.

The curative effect of salicylate of lithium is due in large part to the salicylic acid; for, if the other salts of lithium are substituted for it, the same results are not obtained. Some portion of the beneficial effect is, however, due to the lithium, for the salicylate of lithium is more effective than the salicylate of sodium. The rheumatismal manifestations which resist the action of six and seven grammes (ʒ iss-ʒ ij) of salicylate of sodium, yield to four grammes (about ʒ j) of salicylate of lithium.

To these observations of PROF. VULPIAN (Revue de Thérapeutique, Jan. 15, 1886), the writer will add that he has found the salicylate of lithium very effective in myalgia or muscular rheumatism, given in the quantity mentioned above—fifteen grains four times a day. —*Amer. Jour. of Med. Sciences.*

A HIGHLY PRAISED DIURETIC.—The treatment of dropsy with Apocynum Cannabinum (American Indian hemp), by no means to be confounded with cannabis indica, was lately the subject of an interesting paper read by DR. ANDREW H. SMITH before the New York Academy of Medicine, in the section of Materia Medica and Therapeutics. This plant is indigenous in America, and has long been used and prized for its diuretic properties. DR. RUSH called it "the vegetable trocar." DR. MOTT used it, but thought it too active for any but sthenic cases. In 1869 attention was re-directed to it by DR. HARVEY JEWETT, of Canandaigua, N. Y., who, "as a tonic and diuretic," regarded it as more efficient in the cure of general anasarca and in removing the accumulation from serous sacs, than all other remedies known to the profession. In atonic cases he recommended small doses at short intervals. A rapid cure was the result in his hands, where there was not incurable organic disase. The drug has a place in the Pharmacopœia of the United States, in the form of powder of the root and a tincture prepared from this (see MARTINDALE and WESTCOTT'S Pharmacopœia). But DR. JEWETT used a decoction made with one drachm of the bark of the fresh root to eight ounces of water; of this the dose was half an ounce every six hours. In 1875 DR. HUTCHINS related a case of general anasarca, with pleuritic effusion and hydropericardium, extreme dyspnœa, and enormous distension, in which some of the drug gathered by and got from JEWETT acted so that in forty-eight hours the man who had been so frightfully distended was reduced to a skeleton. DR. SMITH'S cases were three in number. One was a failure, perhaps owing to a bad selection of the drug. In another—a case of renal disease, with scanty urine and threatening uræmia—the apocynum excited profuse diuresis, and danger was averted. The third case was one of general anasarca, ascites, and œdematous lungs, with extreme dyspnœa, face cyanotic, and mind wandering. All diuretics had failed, and it seemed unwise to annoy the patient with further treatment; but as a *dernier ressort* the apocynum was tried, and the quantity of urine was raised from between six and twelve to thirty ounces, and the urgent symptoms were relieved. The drug evidently deserves attention, and to have its action and uses defined.—*London Lancet.*

A NEW TREATMENT FOR GOITRE.—The new treatment used by DR. A. WEISS (Berlin klin. Wochenschrift, No. 2, 1885) is the application of heated points to the surface of the tumor. By means of a Pacquelin apparatus with a pointed iron, he makes punctures about one centimeter apart, the iron being at a white heat. The burns result in little scabs of one to three millimetres, which fall off in a few days, leaving behind them cicatrices which are first red and then white. If the iron is at a white heat there is but little pain produced, and the consecutive treatment consists simply in covering the wound with a layer of wadding. The operation is repeated every six or eight days until the disappearance of the goitre, which requires, according to the circumstances, from six to twelve applications. At the same time a little iodide of potassium is given, but this is not essential. This treatment is particularly beneficial in endemic parenchymatous goitre; in cystic goitre it is not so much so. Sometimes during treatment the goitre ceases to diminish; he then applies, immediately after the operation, a layer of vaseline over the burns; in this way suppuration is set up under the scabs, which hastens the cure. In explaining the curative action, DR. WEISS considers that the heated points provoke an excitation of the terminal nerve filaments which causes a contraction of the muscular coat of the vessels, resulting in an arrest of nutrition and atrophy of the hypertrophied glandular substance. In one case where the goitre was so covered by a network of large vessels that PROF. LUKE could not administer an injection of iodine or arsenic, WIESS observed, after four or five applications of the heated points, a diminution in the calibre of these same vessels, which became normal. In this same case he applied the heated points to a greatly dilated vein in the axilla, and the next day noted a diminution in its volume. He is inclined to use this treatment in other affections, as catarrh, affections of the pleura, etc. In one case of laryngo-tracheal catarrh, an absolute extinction of the voice of several days' standing was completely restored by one application of the heated points.—*American Medical Journal.*

HYDRASTIS CANADENSIS.—Some months ago PROF. SCHATZ, of Rostock, published some results observed on treatment of chronic inflammatory and other conditions of the uterus (fibromata) by this drug. These were so favorable to the employment of it in these cases that HERR FELLNER was induced to experiment with it on curarised animals. The results obtained were lately published in the Jahrbuch der Gesellschaft d. Aerzte in Wien, 1885. The preparation employed was the aqueous extract.

Changes in blood-pressure and cardiac activity were observed. The increased blood pressure was mainly caused by contraction of the blood-vessels, the diminution of it by dilatation of them, the latter being associated with slowing of the pulse. Further experiments showed that interstitial injection of hydrastis caused contractions of the whole uterus, the cornua as well as the body. The maximal effect immediately followed the first increase and diminution of the blood pressure. Inspection of the uterus showed that after every injection of a syringeful of the extract the uterus became markedly injected. As the blood pressure fell a powerful contraction of the whole genital tract, and often of the round ligaments also, took place, with blanching of the genital tract. Contraction and anæmia continued during the whole period of heightened blood-pressure. The alkaloids of hydrastis, and their salts, berberin and phosphate of berberin (1 p. c. solution), and also hydrochlorate of hydrastin (10 p. c. solution) acted on the uterus in the same manner. These experiments seem to show that there is a scientific basis for the employment of hydrastis in the cases for which it has been recommended by SCHATZ.—*Medical Press.*

SOME NEW PURGATIVES.—Under this caption, DR. DESNOS, in a note to the Academy of Medicine (Bull. Gén. de Thérap., Jan. 20, 1886), narrates his experience with that group of cholagogues which were the subject of physiological investigation by PROF. RUTHERFORD, of Edinburgh. DR. DESNOS' study included the following resinoids: Baptisin, sanguinarin, juglandin, and phytolaccin. His conclusions are based on observations made on forty-eight patients suffering from various ailments. With sanguinarin he had only negative results, although given in doses considerably larger than those recommended (60 centigrammes, equivalent to 9 grains). On the other hand, he found baptisin and juglandin to be tolerably certain purgatives and efficient cholagogues, in doses of 20 to 30 centigrammes (3 to 5 grains, in round numbers). Phytolaccin (resinoid of phytolacca decandra—poke-root) proved to be the most efficient member of the group. In doses of 10 to 20 centigrammes (1½ to 3 grains), it causes easy and abundant bilious stools. DR. DESNOS summarizes his experience as follows:

"I conclude, then, that baptisin and juglandin are laxatives which may, perhaps, render considerable service, with the exception of some inconveniences [uncertainty of action, tormina, and tenesmus], and that phytolaccin, which is more certain, and in part exempt from the inconveniences just mentioned, is an important contribution to the therapeutics of constipation."—*Amer. Jour. of Med. Sciences.*

ON POMADE AND SOLUTION OF IODOL.—Iodol, discovered by MESSRS. SILDER & CIAMICIOS, has been tried at the surgical clinic in Rome by DR. GAETINO MAEZONNI. This product represents an antiseptic very much superior to iodoform, of which it does not share the disagreeable odor, nor the toxic properties. In addition to its antiseptic properties, iodol anæsthetizes the point of application and facilitates cicatrization. The remedy comes in the form of a fine powder, and is used in the shape of a pomade or alcoholic solution as follows:

SOLUTION.

℞ Iodol, 3 grammes.
Alcohol, 35 grammes.
Glycerin, 65 grammes.
Mix.

POMADE.

℞ Iodol, 2 grammes.
Vaselin, 30 grammes.
Mix.

—*Repertoire de Pharmacie*, No. 2, Feb., 1886.

APONE; A NEW PREPARATION OF CAPSICUM.—DR. V. POULET (Bull. gén. de thérap., Feb. 15, 1886,) gives the name of apone (from α priv., and πόνος, pain) to a preparation made after the following formula:

Capsicum		6½ ounces;
Ammonia water		3¼ "
Essence of thyme,	each	2½ drachms;
Chloral hydrate,		
Alcohol (60 per cent.)		2 pints.

The capsicum is macerated for a month in the alcohol mixed with ammonia water. It is expressed, the chloral and essence of thyme are added, and the product is to be kept in a well-stoppered bottle. Stress is laid on the formation of a soapy substance by the combination of the ammonia with the capsicin, and, as this change takes place slowly, apone should be prepared long before it is to be used. It is most adapted for external use, pure or diluted with oil, and acts as an anodyne revulsive. The author recommends it highly for muscular rheumatism, certain neuralgias, hysteria, sea-sickness, and inflammatory affections of mucous membranes. Internally, the dose is from 10 to 20 drops, in a little water, and half a glass of water or cold tea should be swallowed at once. The remedy has been used internally with success in the treatment of hæmorrhoids. The addition of a few drops to the drink is said to aid the system in bearing up under the influence of excessive solar heat.—*N. Y. Med. Journal.*

THE MECHANICAL TREATMENT OF THE VOMITING OF PREGNANCY. — DR. JOSEPH TABER JOHNSON publishes in the Journal of the American Medical Association, March 13, 1886, a paper on the above subject. The conclusions arrived at are as follows:

1. That nausea and vomiting, or morning sickness in pregnancy, should not be considered and treated as merely one of the symptoms of pregnancy, but, as a rule, as indicating an abnormal condition of the tissues of the cervix uteri, due to imperfect development, disease, or the effect of disease on the tissues of the cervix.

2. That any pathological state which interferes with the softening and other changes, which the cervix undergoes during pregnancy, may cause nausea and vomiting.

3. That in most cases relief is obtained by freely dilating the cervix uteri below the os

internum, and in many instances it is the only means by which relief can be had. It is true inducing abortion will give relief, but to accomplish this the cervix uteri must be dilated.

4. That in many cases peptic medicines given by the mouth are useless, and, as a rule, should not be used until a local examination is made and the indications for local treatment ascertained.

Apparatus for Applying Heat and Cold.—In the Brit. Med. Jour., Feb. 27, Dr. Robertson describes an apparatus for applying heat and cold at any required temperature, to the spine. It consisted of a long bag divided longitudinally into two compartments with inlet and outlet tubes, the former being attached to the tap at the bottom of a vessel containing hot water, standing by the patient's bedside a little above the level of his body. The bag was being applied daily for three hours to the dorsal and lumbar regions of the spine, and water at the temperature of 130° was slowly circulating through it. The patient's illness was of about eighteen months' standing, and was regarded as chronic meningitis, with slight implication of the motor columns of the spinal cord. He was a man about 50 years of age. He said he had experienced great relief from the pains and other unpleasant sensations in his limbs, since the bag was applied.—*Med. and Surg. Reporter.*

Injections of Arsenic in Tubercle Ganglion.—Dr. Reclus publishes the treatment of a case of ganglionic affection of strumous or tuberculous nature by interstitial injection of Fowler's solution, where the result was rapid and the success remarkable.

A person twenty-four years old, had in the subhyoidean region a tumor, which was voluminous, and of woody hardness, formed by two hypertrophied ganglia. Extirpation was decided on, but before attempting it Dr. Reclus advised recourse to arsenical injections. The patient, at the same time, was taking arsenious acid internally, in the daily dose of two to six milligrammes.

Twelve injections of Fowler's solution in the ganglion were made with a Pravaz syringe, eight drops the first time, then twelve drops the other times, at intervals of four to five days.

The tumor diminished so rapidly in size that after two months of treatment the submaxillary region regained its normal form, and palpation would have been necessary to find in the place of the tumor a hard mass the size of a pea.—*Amer. Journ. of Med. Sciences.*

Benzoate of Cocaine.—Dr. A. Bignon (Nouveaux remèdes, Feb. 15, 1886) considers the benzoate superior to all other salts of cocaine as a local anæsthetic. Benzoic acid, he says, is the natural synergist of cocaine, since it is one of the products of decomposition of the latter, but, when combined with it, increases its stability. Moreover, its antiseptic property is an advantage, and it is stated that the benzoate in solution has a decided odor of coca leaf. Mention is made of the case of a patient with epithelioma of the tongue, who could neither eat, talk, nor sleep, without using cocaine. The hydrochlorate only enabled him to sleep for an hour at a time, but the benzoate secured four hours of continuous sleep. The experiment was repeated many times, and invariably with the same result. The author states that, whereas an application of the neutral hydrochlorate always caused a painful sensation before anæsthesia was established, nothing of the sort occurred when the benzoate was used. The benzoate may be prepared extemporaneously in solution, by using one part of benzoic acid to three parts of cocaine.—*N. Y. Medical Journal.*

Amyl Nitrite as a Physiological Antidote in Cocaine-Poisoning.—Schilling records a case of severe cocaine-poisoning, in which, after the intragingival injection of two drops of a twenty-per-cent. solution of this drug, motion and sensation entirely disappeared. Complete amaurosis and deafness were present. The patient could swallow well, and called to her husband, who was absent, complaining of cold and darkness. Schilling, recognizing the condition as one due to contraction of the cerebral vessles, exhibited nitrite of amyl. The face of the patient immediately became suffused, and she cried: "Now it is light again." After three inhalations she was in condition to reply correctly to all questions, and soon after returned to her home.—*Centralb. f. d. gesammte Therap.*, Feb., 1886.

Prophylaxis of Gonorrhœa.—Haussmann, following up the undoubted favorable results of prophylactic instillations of the prevention of blenorrhœa of the conjunctiva in the new-born, advises the injection of a two-per-cent. solution of nitrate of silver into the urethra after a presumably unclean cohabitation. Ten drops of the solution suffice to destroy the gonococci; the injection should be made, however, within a quarter of an hour after exposure.—*St. Louis Medical Review*, Feb. 27, 1886.

Valerian in Diabetes Insipidus.—Demange says, in L'Union Medicale, that diabetes insipidus is best treated by valerian in doses of two to four drachms of the powder per diem. The drug was highly praised by Trousseau, and has been received since by Bouchard. Excellent results are also claimed from the use of electricity, in the form of the constant current applied over the spinal column.—*Medical Press and Circular*, Feb. 10, 1886.

Local Application of Copaiba in Vaginitis.—Dr. Baratier recommends very highly the local use of copaiba in the treatment of various forms of vaginitis. He employs a suppository containing three-fourths of a grain of extract of opium, and one and one-fourth drachms each of copaiba and cacao-butter. One of these is passed into the vagina every second day and allowed to remain for twelve hours.—*Weekly Med. Review.*

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Original Articles.

CLINICAL LECTURE.*

BY PROFESSOR ROBERTS BARTHOLOW, M. D., PHILADELPHIA.

SICK-HEADACHE.

The first case that I bring before you to-day, gentlemen, is produced for the purpose of demonstrating the results of treatment. You will, doubtless, remember the case of megrim that I had before you some time since. To refresh your memory, I will recall that she was a young girl whom I told you was rosy and healthy looking, but that she suffered from headache and this was followed by nausea and vomiting. You will remember that I pointed out the intimate relation between the fifth nerve and the pneumogastric and that to this connection I attributed the occurrence of the vomiting which was consecutive upon the headache. I told you that in the intervals between the spells the woman enjoyed perfectly good health. Well, now we put her upon the use of caffeine and the effect was immediate. She has not been using the drug long enough for us to pronounce it a positive cure, but the relief afforded by its use is absolute. The dose has been three grains thrice daily.

MALIGNANT DISEASE OF THE LIVER.

The next case is that of a man who comes to us complaining of pain in his liver, which is enlarged. Look at his countenance and see how pallid it is, how waxy and anæmic, yet the appearance is different from that of ordinary anæmia. When considering the countenance in disease, you must not forget always to take into consideration the type to which the patient belongs; well, you see the skin of his face and his lips are anæmic, and at the same time there is some bronzing of the skin; it is a peculiar aspect that he presents. Well now, my man, where do you say your pain is? You see he locates it in the hepatic region, extending also towards the umbilicus; he refers it also to the back, so that we have it before and behind and it shoots up towards the chest, having been, at one time in the history of the case, present in both shoulders. When he lies on his left side he has great dragging pain due to the sagging downwards of the enlarged liver, and that he may get comfort he must assume an attitude that will afford repose to this organ. Upon percussion I find that the liver is enlarged and that the area of dullness is increased downwards, extending two or three fingers-breadths below the margin of the ribs. The edge of the liver feels firm and somewhat indurated; now I feel to see if I can detect any projections or roughness; no, I cannot, but, as I say, the enlargement is downwards and is firm. There is evidently enlargement of the liver, but I can find no evidence of any derangement of any other organ; the urine has been examined, and we do not find any albumen or casts, but we do find bile pigment therein. Speaking of bile, reminds me to tell you that our tests for bile were very imperfect and very unsatisfactory until we were furnished with obvious peptone test, which has put quite a different complexion on the matter, for up to that time we were unable to detect the presence of small quantities, being only able to find it when it was abundant. This man tells us that his stools are white and pasty, thus evidencing the absence of bile from them, but, at the same time, he is not jaundiced. Well now, from what malady is he most likely suffering? To recapitulate, we have a large liver, which is somewhat smoothe in outline and is painful, and the pain is shooting or lancinating in character, increased by a change of position, and there is an interference with the functions, evidenced by progressive emaciation, while the urine contains bile but the fæces do not. The man is forty years old. Such is the complexus of symptoms; what then is the malady? Let us look at the history. Is the enlargement malignant? I think most likely it is. If we had a large liver that was smooth and painless, and if there was albumen as well as casts in the urine, we would have good reason to suppose that the man had a waxy liver, but these symptoms are wanting. We would be especially inclined to look upon it as waxy if we had a history of long-continued suppuration, which is so frequently the cause of waxy or amyloid degeneration. If we had any kind of a chronic suppuration or a chronic dysentery, or both, this would account for waxy degeneration, but we have no such history here. All the facts of the case, indeed, negative this view. When we have pain in an enlarged liver it is very signifi-

* Delivered in the Jefferson Medical College Hospital, March 4th.

cant of malignant disease. I recently had in the clinic here a case where the liver was enormously enlarged but there was no pain, while in this case though the organ is not nearly so large as in the former case, yet pain is a prominent and persistent symptom. He tells us that he has had these symptoms for five months, at least they have been marked for that time, and if we consider the short time that the disease has apparently been in existence, we can account for the absence of nodular and greater prominence, which we ought to have in typical malignant disease. I am very strongly inclined to view this as a case of malignant disease, and I think that the more characteristic signs will develop later on. All the signs that now offer are more significant of malignant disease than of anything else, and let me caution you never to accept any theory of disease that does not include and combine all the symptoms that are present in a given case. If you jump at a conclusion, as it were, deciding on a disease because some of the symptoms of such disease are present, while there are other symptoms that do not represent such disease, and which you throw out of consideration, you will freequently fall into error; your theory must take into consideration and account for all the symptoms that offer in the case. A theory that does not correlate all the facts is erroneous, and in this case I cannot account for all the facts that are present on any other theory than on that of malignant disease. Well now, what can we do for the man; are there any remedies that will do him good? In the present state of our science we can say that we have some remedies that will be calculated to do a great deal of good. We will accomplish the most, I think, from the use of the double salt of the syrup of the iodide of iron and manganese; it will be calculated to retard the progress of the disease and the iron is indicated by the cachixia. The absence of bile from the fæces is not a promising feature in the case, but I hold that it is always the physician's duty to take the most hopeful view of all his cases. Every case should be regarded as curable, and I think it wrong to assume the hopelessness of any case and, acting upon this assumption, to sit down and do nothing; we should, on the contrary, always assume the curability and so act. I would give this man persistently and for a long time the double salt of the syrup of the iodide of iron and manganese and small doses, say about three minims, of Donovan's solution, thrice daily. The dose of the iron and manganese will be one drachm; they may be incorporated together and given after meals. He should also have a nutritious diet and one that is suitable to his condition. Well now, what would you call a suitable diet for a man with malignant disease of the liver? Remember that the urine contains bile, while it is absent from the fæces, and he is not jaundiced. Well, therefore, we must assume that there is an absence of bile from the intestinal canal and, acting upon this assumption, we must exclude from the diet such articles as require the bile for their digestion and transformation. To begin with, we must exclude the fats, because they will not be digested and assimilated. It might be that you would feel inclined in such a case to order cod-liver oil for the improvement of the patient's general condition, but you must remember that it will not be digested owing to the lack of bile. We must therefore exclude all fats. Well, has the bile any further function beyond that of digesting the fats? There is no doubt that some of the bile after performing its duty in the intestinal canal is absorbed and excreted; it is purely excrementitious; such articles should be forbidden as are digested in the small intestine and need bile for their transformation.

Bile is also, undoubtedly, antiseptic and prevents the decomposition of the food. We had better omit from the dietary all saccharine and starchy food, because when the bile is wanting they will undergo fermentation. We should make the diet largely, if possible, of animal diet, more especially avoiding, however, salt meats; he can use oysters, fish and game freely.

CONTRACTION OF THE LIVER—GASTRIC ULCER.

Here is another case where the trouble is located in the liver. The patient is distinctly cachectic and you see the pigmentary appearance about the face. He is pallid; well, what is the cause of it? We must enquire into the history; we must look into the hygienic history, the clinical history, and the disease history. When we inquire about the hygienic history we find that the man has used liquor very freely, not enough to get out of the way, but he has been very fond of his toddy. He has worked in a brewery, and as such men claim that they make a philanthropic liquor, one that does not intoxicate and does no harm, they use it very freely. Such is his hygienic history, and it is of the greatest importance, for it gives us a very good clue to the cause of his trouble. When we come to the history of the disease we find that for some time past he has been troubled when he rises in the morning with gagging and coughing, nausea and semi-vomiting in the efforts to dislodge mucus that has accumulated during the night. He has a disgust for his morning meal and has a veritable morning sickness. He claims that he cannot account for these faults, but we see a cause for it. He has at times had spells of vomiting and he complains of a fixed pain in the epigastrium, extending through to the back, and he vomits blood, the last time about three weeks ago, and, as you see, he has not yet recovered

from the anemia which that hemorrhage produced. When a patient comes to you with a fixed pain in the epigastrium and a pain in the back directly opposite to that in the epigastrium, and tells you that he vomits blood, as a rule, you will find that he has an ulcer of the stomach. Now I will tell you something significant about the manner in which the patient locates the pain. Unconscious acts on his part will do much to enable you to reach a diagnosis. When I ask him to locate the pain you note that he uses only one or two fingers to do so, which action is eminently characteristic of gastric ulcer; if it were due to colic, he would employ the whole hand to indicate its locality. These unconscious movements reveal a great deal. The fixed pain and the vomiting, when taken in connection with the hygienic history are eminently significant facts. The area of hepatic dullness is diminished, and when I press on the abdomen, I can pass my fingers up under the ribs and yet I feel nothing. It is true that the abdominal walls are relaxed, which would account for some of this condition, but I think that it is due, in a measure, to contraction of the liver. Well now, why does he vomit blood? Is it necessary because he vomits blood, that we should conclude that he has a gastric ulcer? I ask him if he has had bleeding piles, for this is an important point, and I learn that he has not. When we have a contracted liver we may have vomiting of blood even though there be no gastric ulcer, but when we have the contracted liver we have good grounds for suspecting that there is also an ulcer of the stomach; how then do these ulcers occur; you know that what we call the alkaline layer of the stomach prevents the gastric juice from acting, from corroding the walls of the stomach itself; and when something interferes with the circulation this alkalinity is lost, the juice digests the mucous membrane, and we have an ulcer. When the circulation in the liver is retarded, as by contraction, for instance, and embolus may form in a vein of the stomach, the circulation in the stomach is thus interfered with, the alkalinity is lost, and an ulcer results. Thus we can comprehend the modus operandi of the production of a gastric ulcer by a contracted liver. But, owing to this impediment to the circulation, a vein in the stomach may give way even though there be no ulcer, and thus, as I have said, we may have vomiting of blood, caused by a contracted liver, even though there be no ulceration. When we have persistent vomiting and when, though there is no evidence of blood to the naked eye, in the matters vomited, yet the microscope reveals the presence of blood globules, we have good reason to suspect gastric ulcer. Now comes up an important question. Can the ulcer be felt by external manipulation? I would reply in the negative to this question as far as a simple ulcer is concerned; of course, if there be an ulcerated malignant tumor that has grown to some size, we can feel it through the abdominal walls. For all the reasons that I have given you, I think that this man has a gastric ulcer. Well, then, having arrived at a diagnosis, what shall we do for him? If it were possible to do so, the most important indication would be to allow the stomach absolute rest. These ulcers have a tendency to heal spontaneously, and if we can place the stomach at rest, the cure will be very rapid. If the patient is otherwise in good health, it will be well to forbid all food by the mouth, and sustain life entirely by rectal enemata, when the ulcer will heal in from a week to ten days. But, of course, we could not resort to such a procedure in this case, where the portal circulation is so much deranged. The rectum would be very irritable, and if it did not at once reject the food, it would, at all events, be unable to properly digest and assimilate it, so that we cannot here resort to that procedure, but we will do the next best thing: we will give the stomach all the rest that we can possibly, and this we will do by restricting him to a milk diet. Well, what else can we do? are there any drugs that will do any good? I do not know of any drug that is as useful as FOWLER'S solution, of which we will order him two drops thrice daily. Next to FOWLER'S solution, I would place the oxide of silver in doses of one or two grains, but I believe that FOWLER'S solution is decidedly the best. When there is very much pain, we may employ minute doses of opium to control it. The free flow of blood three weeks ago has lessened the congestion, and pain has decreased.

I have here the opportunity to show you another case of gastric ulcer, which, in contrast with the one just before you, offers some features of interest, as the cause is different. This patient is a woman about twenty-five years of age, who is engaged in housework. She tells us that she has a fixed pain in the abdomen, and, as I told you in the last case, you see she takes three fingers to indicate the location of the pain. This pain also shoots through to the back, as it did in the former case, and seems to be centered, as it were, in the spinal column. Such pain, as I have said, is strongly suggestive of gastric ulcer, but before we conclude positively, we will look further for other signs. It is a fact that girls about this age, who are engaged as house-servants, seem peculiarly liable to ulcer of the stomach. I had a friend living in New York, who had in his household, as a servant, a buxom, strong, healthy-looking girl, who was suddenly seized, while in the midst of apparent perfect health, with the most excruciating abdominal pain. She grew rapidly worse, symptoms of depression of the vital forces set in, and in twenty-five hours from the

time that she was first seized she was dead. The family were amazed; they did not know what to make of such an occurrence, and the physician who was called in was much chagrined at his want of penetration. The autopsy revealed the mystery, for there was found an ulcer of the stomach that had perforated its walls, and set up a most violent peritonitis. Fortunately, when we recognize the presence of an ulcer, it is very readily curable; there is no condition that is more so. But, as I said, we must look further in this case, and see if we have any further reasons beyond the presence of pain, to warrant us in pronouncing this to be a gastric ulcer. The pain is always aggravated by the ingestion of food, and is worse about one hour after the food is taken. It is very severe, and extends somewhat down into the abdomen, though the most important pain is that which shoots through to the back.

I wish to call your attention to the statement that the pain is most intense one hour after the ingestion of food; this is followed by nausea and vomiting. What is the character of this vomiting; do you vomit blood? No. Well, is the vomited matter ever streaked with blood? Yes, quite frequently. So I thought; here then we have this additional evidence of ulceration. The pain, its increase by food, the blood-streaked vomit are all so characteristic that I am forced to conclude that this woman has a gastric ulcer. Now, let us look into the cause; in the last case we had a diseased liver to account for the ulcer, but we have no such factor here; we have here no reason to suspect hepatic disease of any kind whatsoever. Well, where shall we look for the cause? In anemia, there is a change in the intima of the blood-vessels, that disposes towards thrombosis, and when such an obstruction forms, the circulation in the stomach is interfered with and an ulcer results as I have already explained. Therefore a state of anemia will account for certain of these cases. As a rule, house-servants live on an exceedingly faulty diet. No matter how plentiful may be the supply of the most wholesome and tempting diet, they will turn away from it to use that which is injurious to them. They will make their diet principally of bread, butter and tea, or sometimes coffee, but, as a rule, they consume enormous quantities of tea. In such cases the vicious diet and the condition of anemia will account for the ulcer. Well, in such cases, it is of course very hard to regulate the diet; these girls must do a deal of hard work and they must have a corresponding amount of nutrition. But we should regulate it as far as we can; while we cannot strictly confine them to milk, as I recommended in the last case, their diet should consist of milk, soft-boiled eggs, mutton, beef or chicken broth and oyster soup. As in the last case, we will give this girl two drops of Fowler's solution, thrice daily, and if she is costive, we will regulath the bowels by enemata or purgative suppositories, preferably the former.

GONORRHŒAL RHEUMATISM.

Here is a man who has a swollen joint; what is it? Is it an abscess forming? I think not. When a young man comes to you with one joint swollen and painful, what is most likely the matter with him? I would say that it was most likely gonorrhœal rheumatism, and such it proves to be in this case. The pathology of gonorrhœal rheumatism has not yet been definitely settled; why the disease is so concealed we do not know; it behaves just like ordinary rheumatism, save that it is confined to one joint and, as a rule, during the continuance of the rheumatism, the gonorrhœal discharge is much lessened and often ceases entirely. Such facts would indicate metastasis, but we no longer hold to the old doctrine of metastasis. Such cases are very hard to cure. We will derive great good from the use of small blisters applied about the joint, not directly over the joint, but just above and below it. We might blister about the joint with cantharidal collodion, but not directly on it. It is a fact that the local use of blisters so impresss the system as to change the urine from an acid to an alkaline condition, through their influence on the trophic nerves. Of internal remedies, a host have been tried, but they do very little good. I derive the best results from the use of the tincture of the chloride of iron. The green iodide of mercury, in doses of $\frac{1}{20}$ to $\frac{1}{12}$ of a grain thrice daily in combination with $\frac{1}{6}$ to $\frac{1}{4}$ of a grain of extract of belladonna, or the use of minute doses of bichloride of mercury, with iron and blisters locally, will constitute the best treatment.

HEART DISEASE IN A BOY.

This case presents some very interesting features from an etiological point of view. The patient is a boy, ten years old, who has some cardiac trouble. When we inquire into his past history we learn that he has never had rheumatism or diphtheria, or any of the diseases that are usually credited with producing heart disease. About four years ago he had, what his mother calls, malaria; her account of this illness is not very clear, but it would seem that at the time he had chills and some fever, and when we inquire closely into the history of this attack, we find that he had some cough and expectoration, of a frothy mucus, his mother says. He did not spit up any blood, but it is supposed that his present trouble with his heart was caused by that attack, as there is no other way to account for it. I think that most likely this theory is the correct one. The question for us to decide is as to the nature of

this febrile attack four years ago. As he had cough and expectoration, I am inclined to think that he had some local inflammatory trouble of the chest and that this inflammation extended to the heart by contiguity of structure. I think it highly probable that the heart disease originated in this way. Now, that I have him stripped, look at his chest, for you will see something very significant. There are certain signs that tell us that the inflammatory trouble must have invaded the pericardium, and it has left its marks behind. Well, now, what are these characteristic signs? Look at the surface of the chest and you can plainly see the movements of the heart, and with the apex beat you will see a peculiar motion. When the heart dilates the wall of the chest is forced outwards, and when the systole occurs it is drawn inwards, so that you can see there is a distinct depression in the region of the apex. The same condition holds good on the right side, but not nearly to the same degree as on the left. Well, now, what is characteristic in this condition of the chest-wall, when the heart cavities are filled, the chest protrudes, when they are emptied it is drawn in? These facts mean that the muscular tissue of the heart is adherent to the pericardium, and that, in turn, the pericardium is adherent to the inside of the chest wall. Another peculiarity that I observe is a very distinct thrill, especially noticeable at the apex, and extending for some distance away from it, which is transmitted from the heart to the chest-walls, and from there to the hand, and, which I consider to be due to the stretching of the bands of adhesion and their vibration. When I apply the ear to the chest I find a very peculiar condition of affairs. I hear a murmur that seems to take the place of the first sound; in fact, it begins a little before it, and lasts all through it, and almost immediately thereafter comes the second sound. This murmur is loudest in the mitral region, though it extends some distance from it. From these facts, therefore, I conclude that the boy has a cardiac lesion, both endo- and pericardial, mitral surely, and probably also aortic. Well, now, is there anything that we can do for the boy? His principal complaint is shortness of breath, but his general health is very good. Most of the trouble about the heart has been compensated. Let me tell you what I mean by compensation: I mean that the circulatory system has accommodated itself to the altered action of the heart, hence, there is so little general disturbance. He has no cough and no œdema. So long as this compensation lasts, there will be but little use for drugs, but if the compensation becomes deranged, then we must endeavor to restore the balance. I will advise this boy's mother to make him avoid all exercise or labor that will tend to strain the heart; he should only take enough exercise to keep his functions regular, and should avoid all the usual violent plays so common among boys. His diet, too, should be carefully regulated, excluding all indigestible articles. If the compensation becomes at any time disturbed, we must restore it by using compound jalap powder to relieve the congestion of the portal system, which then occurs, and digitalis for its direct action on the heart. There is no other treatment that will be of any avail at present.

EPILEPTIFORM CONVULSIONS.

Here is a case that will well illustrate a point that I have repeatedly endeavored to impress upon you, both in my clinical and didactic lectures. The patient is a woman, aged forty-five years, who has no trouble with her nervous system of a radical nature, but has been for some time subject to nocturnal epileptiform convulsions. The point that I wish to impress upon you is that attacks like these are epileptiform, and not true epilepsy. True epilepsy commences early in life, nearly always before thirty, and usually before twenty years of age, and the paroxysms usually occur in day time. The epileptiform seizures are significant of tumor, of a gumma of the brain, which is the most usual cause. If a man or woman, at the middle period of life, commences to suddenly experience epileptiform seizures, if you are wise, you will look for a specific cause. This woman has passed through the climacteric period, not having seen her menses for two years; such is her personal history. She was seized with these attacks suddenly, without warning. She loses consciousness, but is not generally convulsed, which is another very significant fact. The convulsive movements, in such cases, may begin in the hands, the arm, foot, leg, or the face, and by studying where it commences you can get a clue to the seat of the lesion, for it will be most likely located in that portion of the brain that has anatomical connection with the part convulsed. We make inquiry here in reference to this point, but cannot get an accurate account. Another element of importance in the case is that the woman complains more or less, all the time, of dizziness; her vision is somewhat dim and the eyelids are swollen. The eye-ground has not yet been examined, but it is very important that it should be, for I am quite sure that we would find the veins tortuous and enlarged. The swelling of the eyelids is very significant, because it indicates to us that there is an intra-cranial congestion, and I would impress this connection upon you because it is an important corroborative sign of intra-cranial congestion. She has also suffered from repeated hemorrhage of the nose, which is another characteristic sign of intra-cranial congestion. I am very strongly inclined to think that this trouble is

specific in nature; of course, such symptoms might be due to a more slow-growing tumor about the base of the brain, that did not press on any of the cranial nerves and hence did not produce any derangement of the special senses. Assuming that the trouble is specific, what shall we do for the patient? I suppose that she has not had proper treatment. No doubt she has had mercury, but I do not believe that it has been given intelligently and persistently. I will begin the treatment by giving her one-sixth of a grain of the green iodide of mercury and the same amount of extract of belladonna thrice daily. After she has taken this for some time, I will stop it and give her iodide of potassium in doses of one scruple, thrice daily. This will be the general treatment for what I am assuming to be the cause. For the seizures themselves, we will use the bromides. There are certain cases wherein the bromides are especially serviceable and others where they are not so strongly indicated, but in a case like this, I would say that the bromides are exactly what we want to use. For the first week, I would give the bromide of sodium, in drachm doses, morning and evening, and later reduce the dose to a scruple.

PSEUDO-ANGINA-PECTORIS — PREMATURE SENILITY.

This man tells us that he is forty-nine years old, but from a physiological standpoint I would say that he ought to be sixty. He has all the evidences of age; his hair, as you see, is white, his arteries are rigid, there is general atheroma and his face would fit well on the shoulders of a man full ten years his senior. Therefore the first fact that we note about his condition is this premature senility. He also has very irregular action of the heart; when I place my fingers on the pulse, I can only feel one beat in every three or four, so irregular is the heart. There is no murmur. This condition is very significant of changes in the substance of the heart itself as well as in the cardiac motor ganglia. He has peculiar attacks that somewhat resemble angina-pectoris, but do not constitute the true disease; it is really a pseudo-angina-pectoris. There is pain in the region of the heart and irregular action. Such cases are not uncommon and they demand con siderable attention. When a prematurely aged man is troubled with pain in the heart and shortness of breath and cardiac irregularity he will be very much frightened, and will be very grateful for any relief you may afford him. The longer a man lives the stronger he holds on to life, and when he has reason to fear that his hold on life is weakening, he becomes very much alarmed. The older they grow the more solicitous they become, and the more they expect from the doctor; they want you to spin out their slender thread, and it will be a great mistake on your part if you treat their pleas as the vagaries of old age and do not carefully consider them and give all the relief you can. Well what can we do? In the first place, we must improve the nutrition, both of the heart and the general system. For this double purpose, I know of no better remedy than arsenic given with cod-liver oil, and perhaps carbonate of ammonia. In this condition of arterial change in cases of senility, the combinations of the alkali with cod-liver oil is particularly efficacious. We will give this man the arseniate of iron, one-sixth of a grain, and extract of nux vomica, one-fourth of a grain, in pill, thrice daily, after meals. He will also take a tablespoonful of cod-liver oil after each meal. Well, so much for the general treatment; now what will we do for the paroxysms? Here I know of nothing better than nitro-glycerin; it is wonderful how this drug will relieve the distress in these cases. We will use the centesimal solution, the liquor nitro-glycerinæ, that is one minim of nitro-glycerin to 100 minims of alcohol. We will begin with one minim thrice daily and add one minim to each dose until the physiological effects of the drug are produced. The physiological effects are flushing of the face, some headache and dizziness, with increased force of the heart's action. These effects are very transient, they soon vanish, hence the patient does not object to them. As a rule, these effects will be felt after the dose has reached three minims, that is the rule, but in some they will be produced by one minim, while some will tolerate five. The rule is three. It is essential that the physiological effects be produced, for short of this the drug will not exert its therapeutic influence.

MANACA (FRANCISCEA UNIFLORA).

BY M. T. LOVE, M. D., SHELBY, OHIO.

This drug, the synonym of which is *Mercurio Vegetal*, is the Brazilian remedy for rheumatism.

A sample of the fluid extract of manaca was placed in my hands, and a perusal of the scanty literature of the plant's medicinal properties led me to hope that the preparation at my disposal might modify and improve the secernent and eliminatory functions in cases where this indication is unmistakably to be met. I believe it is agreed that this is the leading therapeutic indication in chronic articular and muscular rheumatism. It was not long before I had an opportunity to put the remedy to the test.

About September 1, 1885, came to me T. B.; male; æt. 40 years; railroad employé; medium temperament, inclining to sanguine, one in whom we would expect a prompt response to

medication. Diagnosis, chronic muscular and articular rheumatism. Duration, nine months. Had been under treatment seven and one-half months, by a good regular practitioner, without improvement. Came to me walking on crutches. Some swelling of knee-joints and complaint of severe distress. Pulse weak, irregular, but no febrile action. Appetite fair. Bowels irregular. Pain in region of kidney. Secretion of urine irregular in quantity.

I began with the fluid extract of manaca in doses of 5 gtt. every four hours, and increased a drop each day until 22 drops were given at a dose, at which time the kidneys became active, and I discontinued the medicine for a day. The soreness of the muscles and joints disappeared from above downwards. At the time I discharged him he only complained of a slight weakness of the knee-joint. Crutches had been discarded at end of third week of treatment. The appetite had improved. The weight of the body had increased, notwithstanding the apparent depleting action of the drug.

It was noticed by his acquaintances that he was improving, and his answer to inquiries was: "O, I have a new physician with a new remedy."

He was under treatment in my hands six weeks. I quit the case about October 15, 1885, owing to my absence from the vicinity.

The only additional treatment he received was the application of electricity to the knee-joint most affected, and probably this aided somewhat, although not to any marked extent. After the lapse of five months, he remains in the same fair condition.

It is true this is only one case, and of itself is not conclusive, but taken with numerous other reports (already accessible to the profession through the valuable assistance of the Scientific Department of MESSRS. PARKE, DAVIS & CO.) it will be a unit in the array of facts necessary to decide ultimately upon the relative position in therapeutics that manaca is destined to hold.

THE PROPHYLAXIS OF HYDROPHOBIA.

BY R. L. PINCHING, M. R. C. S. LOND., SAN FRANCISCO, CAL.

I must confess that I was not surprised at PASTEUR'S failure in his inoculation of one of his Russian subjects who had been bitten by a rabid wolf. He had taken his idea from the celebrated JENNER, but in my opinion the cases are not parallel. Many years ago while holding the position of medical attendant of a small dispensary under the patronage of the late Lord Viscount Ferrard of Ovid Temple, in the county Louth, Ireland, 26 miles from Dublin, I was called on to see three cases of persons who had been bitten by a mad dog. Two of them were children, one a child about four years old, the other seven years old; the third case was that of an elderly man. The two children were regularly worried, their face, neck and hands being fearfully lacerated by the brute.

I washed their wounds carefully with warm water and soap, and after wiping the parts well with soft rags, I applied a strong solution of the caustic potassa.

In the case of the old man, who was bitten in the leg through a woolen stocking, I excised the wound, and after cutting out the bitten part, I touched it with nitric acid. Had I touched the wounds of the children with the same instead of the liquid potassa I think I should have saved them, but at that time I was a very young and inexperienced practitioner. Six weeks after the children had been bitten, the younger child was seized with hydrophobia in its worst form, and died about the fourth day. The elder child was seized about the seventh week, and died in a few days in terrible agony. The old man escaped.

I communicated with the two most prominent surgeons in Dublin, one my most respected preceptor PROF. COLLES, of the Royal College of Surgeons of Ireland, and the other my respected and accomplished friend, MR. CRAMPTON, afterwards SIR PHILIP CRAMPTON, Surgeon General of Her Majesty's forces in Ireland. MR. COLLES recommended the administration of calomel and Dover's powder so as to get the children under the influence of the mercurial. I had a very interesting letter on the subject from MR. CRAMPTON, in which he states that he had been consulted by a family in Dublin, three of whose children had been bitten by a rabid dog a short time before; a horse was also bitten by the same dog, and showed symptoms of hydrophobia some weeks after, and was shot. The parents of the children then became very much alarmed, and at once sought MR. CRAMPTON'S advice. He recommended the bitten part on each of the children should be excised, which was done, and they all escaped, to the best of my recollection, as it is now many years since the occurrence. "If," added MR. CRAMPTON, "you extirpate the vesicle of the vaccine or the vesicle of the variola virus before the eighth day, that is before the specific action manifests itself on the patient, you will prevent the pox from affecting the individual. So with respect to the rabietic virus, if the part bitten be cut out at any time before the appearance of the rabies, that is whilst the poison lies dormant (which it sometimes does for months), you will prevent the rabietic virus from entering the system through the circulation." This is, as far as I can recollect, the gist of MR. CRAMPTON'S letter to me on the subject.

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Editorial.

ANTI-CREMATION.

The arguments which have been advanced against inhumation and in favor of cremation, as a means of disposing of the dead, have been received with so little question during the past few years, that the prejudice engendered of sentiment has been so largely overcome as to have permitted the construction of a number of furnaces. At the beginning of the agitation in favor of incineration, the prospects of success were so small as, doubtless, to have spared the method very much of the opposition which it would have encountered had its successful introduction seemed less problematical. Latterly, however, the friends of inhumation have begun to bestir themselves, and those who have been able to advance no reasons other than those based on sentiment, now find a champion among scientific men in the person of Dr. Frank H. Hamilton, of New York, who brings to bear on the subject the weight of his strong and incisive pen, in Gaillard's Medical Journal, for April. He summarizes the objections to cremation as follows: 1st. The danger to health and life from the present mode of burial, when the inhumation has been properly made, has, by the advocates of cremation, been greatly over-estimated, if, indeed, it can be said to exist at all. 2d. Cremation removes effectually one of the most important means of detecting certain crimes. 3d. The general sentiment of the community in which we live is opposed to cremation: and, in view of the fact above stated, it would be unnecessary, unjust, and unwise to enforce cremation by legal enactments.

The first of these propositions is the only one which requires extended consideration. Preliminary to his discussion of this proposition, Dr. H. takes occasion to say that he uses the terms "septic gases" and "septic germs" as synonymous and convertible, since they cannot always be separated, and because the germ-theory of disease is not universally accepted, M. Peter, a distinguished savant and a member of the Academy of Medicine of Paris, openly declaring it to be his intention to emancipate medicine from the tyranny of the microbes. The first point made by the writer, is that the products of the decomposition of animal matter, are, notwithstanding their offensive odor, very much less pernicious in their effects upon human life and health, than those resulting from the decomposition of vegetable matter. In support of this assertion he refers to an elaborate report by Parent Duchatelet, a member of the Council of Health, of Paris, in 1856, and draws illustrations from facts derived from the slaughter-house districts of New York, Cincinnati and Chicago. A pool of stagnant water near an encampment, moreover, has proven more poisonous than the odor from several putrefying horses; and the sewer gases, which may not even be detected by the sense of smell, issuing from a small leak in a water-pipe, are notoriously more poisonous than the odor of a dead cat or rat, whose putrid carcass, hidden within the walls, would compel the tenants to abandon the apartments; illustrating again what every sanitarian knows, that the offensiveness of an odor is no test of its insalubrity.

Experience teaches that there are two kinds of septic influences resulting from the decay of human bodies, and no doubt also from the decay of the bodies of most other animals; but these latter have been less carefully studied. These septic influences, or entities, differ from each other as to the period and rapidity of their development after death, their duration, and their character. The one, apparently the result of the perverted action of the expiring vital forces, is at its acme immediately after death, and terminates when putrefaction of the body is fairly established; the average period of its duration may therefore be fixed at three or four days. The other septic influence, commencing with the process of decomposition, reaches its climax when the process of putrefaction is complete; the period of its duration is therefore very indefinite. The one gives out no septic gases, or germs, if the term be preferred, and therefore conveys no poison to those who only inhale the surrounding atmosphere, except temporarily, in case the person has died of some infectious malady; but the power of infection from respiration is, even in these latter cases, limited to a few days. The other is constantly eliminating noxious gases, the result of the new chemical combinations of the disintegrating tissues. The one, incapable of communicating disease by respiration (with the exception noted), is capable, however, of communicating disease by inoculation; while the other, capable under certain circumstances, that is, when the gases are sufficiently concentrated, of causing disease by respiration, is

almost wholly incapable of causing disease by inoculation.

It is owing to the differential distinctions between these two classes of animal poisons that we are accustomed to speak of "autopsy wounds" as representing entirely distinct and separate classes of wounds. Autopsies are made usually a few hours after death, and the wounds received from the instruments employed in the autopsy often entail serious and occasionally fatal results, which are seldom or never attendant on wounds received in the dissection of bodies which have been dead several days; and it is only after the lapse of several days that bodies are handed over to the anatomist for the purposes of dissection.

Since, therefore, persons who die are not, in most cases, finally removed from the presence of their surviving friends until after the lapse of from two to four days—whether they be disposed of by cremation or burial—the practical question with which we have to deal is, What amount of danger is there to the living from the bodies of those who have been properly laid in the ground?

The observations of DUCHATELET, LALLEMAND, DUBOIS, DUPUYTREN, BOYER, and DESSAULT, of the effects of the exhalations from dissecting rooms on the health of students, are adduced to prove that the emanations from such bodies are comparatively void of danger. DESSAULT, in referring to the immunity from disease which he himself, and those employed by him, enjoyed, took pleasure in repeating the old saying: "*Morte la be temort le venin*" (when the animal dies, the poison dies also). The observations of English and American anatomists are referred to as supporting those of their French brothers.

Having, after the manner above indicated, shown that the emanations from decaying and unburied animal matter are comparatively harmless, the author proceeds to consider in what manner or degree these relations are changed by burial beneath the surface of the earth.

The period occupied in the complete disintegration of bodies thus buried will depend chiefly upon the condition of the body when buried and upon the nature of the soil in which it is deposited; but it may be said that this period, or the period of the evolution of gases, whether poisonous or otherwise, does not generally exceed a few months. If not imprisoned by the peculiar nature of the soil, as by a clay soil, for example, or by artificial means, such as a vault or metallic coffin, they escape as rapidly as they are formed into the surrounding soil. These gases are chiefly carbonic acid gas, ammonia, sulphuretted and carburetted hydrogen. In this country, in most cases, bodies are buried to the depth of from four to six feet, most often six feet; and through the superincumbent soil the gases have to penetrate before they reach the surface, if, indeed, in their original condition they reach the surface.

Chemistry and experience have alike demonstrated that these and most other gases, and the fluid or solid organic matters which sometimes find exit with them, rapidly undergo changes by entering into new combinations when brought into contact with the earth. This is illustrated in the familiar experience with the so-called "earth closet," and is to the scientist a well-known fact. The same thing occurs, also, when these gases or organic matters are deposited in moving water. They are said to become oxidized; but, whatever the change may be, their original identity is soon lost, and with it their power of doing harm. If this were not so, no water could ever become potable, since there is no water into which these gases and foul organic substances do not find admission.

If many bodies were deposited at the same time in a great vault, or in superficial trenches, it is easy to understand how the gases and organic matter might, for a time, penetrate the soil unchanged, and in a sufficient amount to render the surrounding atmosphere and the adjacent water unwholesome; although after the great battles of modern times, where many thousands have been thus buried in a single day, no accounts have reached us of sickness or of pestilence thereby induced.

In the case, however, of our civic and rural burial grounds, within which bodies are deposited one by one, at considerable intervals of time and at great depth, it would seem impossible to the author, in the light of the accumulated testimony now presented, that any harm should come to the living; and he would seem justified in dismissing the subject at this point with the aphorism, *non credo quia impossible est*, without attempting to rebut the specific testimony by which the advocates of cremation as a sanitary measure attempt to sustain their position.

He, however, prefers to consider the evidence which they adduce, and calls attention to the singular fact that American cremationists almost invariably go to the burial grounds of Europe or Asia for the facts on which to base their arguments against inhumation, no facts being drawn from American grave-yards to support their position. This he holds to be very unfortunate, inasmuch as the distance of these foreign burial grounds makes it practically impossible for the doubter of the alleged facts drawn from them, to critically examine their surroundings with a view of discovering whether there is a proper relation between *post hoc* and *propter hoc*. Those who have been accustomed to search for the sources of maladies which have a temporary or even permanent existence in certain localities, know how diffi-

cult it is, in most cases, to ascertain their true source, and not one of the examples which DR. HAMILTON has seen recorded is accompanied with any evidence that the proper care had been taken to exclude all other sources of contamination and of causation. This may be said to amount only to a general denial; but the author holds that this is all which seems to be required, as against the positive and undisputed facts which he presents.

There is one observation to which the advocates of cremation especially refer as furnishing conclusive testimony as to its importance and necessity. A cow which had died of charbon was buried in a field in the Jura, nearly seven feet below the surface. Two years later PASTEUR found in the overlying earth germs which, being inoculated into a guinea pig, caused charbon and death; in explanation of which observation it was assumed that, prior to the completion of the process of putrefaction, the germs had been carried to the surface in the alimentary canals of earth-worms, and there deposited, with their excrement. T. SPENCER WELLS, in referring to this case, says: "The parasitic organism, or bacteridium, which, inoculated from a diseased to a healthy animal, propagates the specific disease *may be destroyed by putrefaction after burial.* But before this process has been completed, germs or spores have been formed which will resist the putrefactive processes for many years and lie in a condition of latent life, like a grain of corn, or any flower seed, ready to germinate and communicate the specific disease."

Whether this observation of PASTEUR is to be considered as reliable or not, in this connection, DR. H. holds to be of no importance, since it in no way affects his argument, unless it be favorably. The animal which died of charbon was sick, no doubt, many days, while continuing to graze in the fields. During this period, and while laying dead and uncovered upon the ground, periods including what is known to be those in which the evolution of specific germs is most abundant and active, they must have been scattered far and wide to infect the air and the soil. It is quite apparent, therefore, that cremation would not have furnished an adequate remedy for the spread of the infection.

We are assured, and there is no intention to deny the assumption, that many of these specific germs and spores not only resist, as in the case just quoted, the heats of summer and the frosts of winter, but that some of them are almost absolutely indestructible. The air, earth, and water teem with these invisible enemies to human life, including not only those germs of a septic character, which have not, as yet, been classified, but also the germs of specific disease, such as diphtheria, typhoid fever, and probably all other epidemic, infectious, and contagious diseases, which germs only need to be brought into favorable circumstances to be awakened into activity.

How feeble and inefficient will then our efforts appear to be, in contending with these parasites, if we limit our labors to the cremation of human bodies. In this war for existence, nothing short of the cremation of all animals, human and brute, at the earliest accession of certain specific and infectious diseases, will avail anything; or, if they are permitted to die a natural death, they must at least be cremated as speedily as possible after death. Indeed, nothing less than the cremation of the whole world, including its atmosphere, would seem to offer a fully adequate remedy.

DR. HAMILTON disclaims responsibility for the startling alternatives and conclusions to which the revelations of modern science have inevitably brought us.

TREATMENT OF CHRONIC CYSTITIS.

The successful treatment of chronic cystitis demands a correct diagnosis of its cause, for remedies addressed to the symptoms are purely of the hit-or-miss order. DR. P. S. CONNER clearly sets forth this fact in a paper read before the Cincinnati Academy of Medicine, and published in the Lancet and Clinic. Each case coming under treatment should be examined with the surgeon's eye, and all abnormalities removed before resorting to medication.

It stands to reason that if the inflammation is excited, maintained or aggravated by the irritant character of the urine, just in proportion as such is lessened, will the morbid state be diminished; and this can be effected in no slight degree by increasing the amount of urine passing through the bladder. To such flushing of the cavity, distributing and carrying away the sedimentary mucus and pus, is due the favorable effects of the administration of large quantities of water, either any ordinary soft water, or that obtained in a state of great purity from certain springs.

Some of the infusions, DR. CONNER maintains, owe a part at least of their reputations to the good effect of the cleansing of the bladder by the increased amount of urine passing through. For like reasons, washing out the bladder by injections acts beneficially, provided it is properly done, and with a suitable fluid. The instruments must be clean in the fullest surgical sense of the word, the fluid warm and such as to arrest and prevent decomposition. Theoretically the weak sublimate solution is the best that can be employed, but practically it is found not infrequently to be badly borne even when of strength of not more than one part in 6, 7 or 8,000. As good a solution as can

be used is, in many cases, that of boracic acid of strength of ʒss—ʒj to the pint of water. Care must always be taken not to throw in the fluid too rapidly or too strongly, and if a single current catheter is used not to over-distend the bladder.

In elderly men an existing cystitis, if neither stone nor stricture is present, almost always depends upon enlargement of the prostate, in a small proportion of cases confined to the third lobe. Such enlargement acts as a stricture does, producing the same condition of the urine and of the bladder wall. In the earlier stages and the milder degrees the indications for treatment are very clear. Systematically, at regular intervals, the bladder must be completely emptied, and that with the least possible effort to the patient—in other words, catheterization should be made and natural evacuation altogether suspended; suspended, not abandoned, for not infrequently after steay use of the catheter for many months or years patients may, withot resulting ill effects, permanently lay aside the instrument.

In the older and severer cases, when the general hypertrophy of the prostate is marked, the basfond of the bladder consequently deep, the residual urine in decided amount and alkaline in reaction, catheterization and antiseptic irrigation are the essentials of treatment; attention to which, together with due regulation of the general habits of life, will ordinarily keep the patient in a state of comparative comfort. Even when the muscular coat has been so enfeebled as to permit of over-distension and of long retention with its usually associated and resulting incontinence, the same method of treatment steadily maintained for months will, if there has not been too much damage done the kidney, produce marked improvement in the local and general state. But oftentimes, the bladder instead of being overtolerant is excessively intolerant of fluid, the presence of a very moderate quantity of which is sufficient to excite a spasmodic, painful, imperious desire to urinate. This condition may be associated with and dependent upon prostatic hypertrophy, very apt to be of the ball valve variety or complicated, as it often is, with urethral stricture, upon bladder tumor, or upon tubercular disease of the prostate or the seminal vesicles.

The intensity of the irritability of the bladder is many times markedly affected by the habits and mental state of the individual. In these cases the plan of treatment already indicated may be sufficient to so greatly lessen the severity of the symptoms as to render the patient unwilling to have anything else done. When there is decided difficulty in the introduction of the catheter, either because of the size and direction of the canal, or because of an oversensitiveness of its lining membrane, permanent retention of the instrument has been advised. In Dr. Conner's judgment such advice is not good, for even if a soft catheter is employed (and it certainly is to be preferred), it will soon become encrusted, it will be almost certain to increase the irritation, and it will be very difficult, if not impossible, to keep it aseptic. In many cases, indeed, in the very ones in which a sonde a demeure would seem to be most indicated, no soft instrument can be introduced.

It is in these cases of severe character and often of irritable nature that operative interference is so strongly called for, and is capable of accomplishing so much. Open out the contracted urethra by sound or knife, and the pre-existing bladder inflammation will generally rapidly diminish, perhaps altogether disappear.

If there is prostatic enlargement what can be done? Only a few years ago, comparatively, it was hoped that in parenchymatous injections of the enlarged gland we should find a means of producing shrinkage, but extended experience has proved its utter valuelessness. Prostatotomy and prostatectomy, either internal or external, have much to commend them. Dr. C. is becoming more and more convinced that in all the severer forms of chronic cystitis in the male, either perineal section or supra-pubic cystotomy should be made. By a comparatively slight operation, the opening of the membranous urethra, we may readily get at the prostate, recognize the position of, and so be able to remove by knife, punch or snare, a bar or ball obstructing the neck, and in the majority of instances be able with the finger to sweep a part or the whole of the mucous wall of the bladder, thus locating any tumor that may be present. Through such perineal opening any existing prostatic or vesical calculi may be removed. Further and more important, thorough and complete drainage of the bladder may be secured, a full-sized tube being easily introduced, comfortably well borne, and readily removed; no such objections resting against its protracted use as we have seen lie against a permanently-retained catheter passed through the unopened urethra.

Experience has shown that the pressure of a drainage tube thus employed causes a dilatation of the neck and prostatic portion of the canal that may be expected to be permanent, and which will permit, after some weeks or months, of the removal of the tube, and the allowing of healing of the wound. By drawing off the urine as fast as it comes into the bladder, there is secured to that organ the rest which above all things else is the essential element in the treatment of any surgical affection. If the cystitis depends (as it probably does much oftener than is commonly supposed) upon a vesical tumor, the perineal operation permits of the determination of the location,

size and nature of the neoplasm; of its removal, if practicable; and under all circumstances of the cleansing and draining of the cavity.

In those distressing cases, met with usually in young subjects, of cystitis dependent upon local tuberculous deposits, where the symptoms of stone are so strongly simulated, perineal section with dilatation of the prostatic urethra or division of the gland, gives more relief and that more speedily than anything else that can be done. GUYON and his followers of the French school urge that the opening into the bladder should be supra-pubic; and there are unquestionably advantages in such operation over the perineal one, with, however, associated disadvantages, so that extended experience alone will suffice to clearly indicate which should be regarded as preferable in the ordinary run of cases. In any and all forms and grades of chronic cystitis the prime indications of treatment are to remove the cause and give the organ rest; and just in proportion as these indications can be fulfilled will relief be afforded and a cure effected.

ARE ANTIPYRETICS SAFE?

Years ago an old practitioner who was noted rather for his success in treating disease than for the more showy acquirements which are now-a-days held necessary to professional distinction, shocked us somewhat by his condemnation of the antipyretics which we were giving to a case of scarlatina. "But, doctor," we remonstrated, "the temperature is 105° F. What would you do with such a temperature?" "I don't know anything about temperature," he replied, "I never owned a thermometer. All I know about these cases is that the hotter and drier my patient's skin is the more certain I am to pull him through." This was, of course, old fogyism run mad, and our contempt for this old man, notwithstanding the "bull-head luck" which seemed always to attend him, was supreme. With the lapse of years, however, we have, time and again, been almost persuaded that there was method in the old man's madness, although we didn't exactly know how to reconcile it with the ruling views on pathology. The teachings of BRAND and LIEBERMEISTER have for a quarter of a century been so generally accepted that to question them would subject the questioner to ridicule, and the end of treatment in fever has been to get rid of the heat—to reduce the temperature. While our old friend's belief that a high temperature is auspicious, is, perhaps, and probably, not tenable, there are those (and their number is increasing) who believe that there are worse things than heat in fever, and that the patient's prospects are better when his system is not surcharged with the drugs which modern medicine gives to remove that heat or to prevent its generation.

In an article on the use of antipyretics in the Medical Record, DR. A. A. SMITH questions the advisability of giving the agents of this class in the enormous doses which have latterly become fashionable. In very, very rare instances would he advocate the use of the cold bath. He believes that all the good to be obtained from the bath can be obtained by milder and less objectionable methods. Cold sponging, wet pack, ice to the head, the cautious and short-time use of the cold coil, and the careful use of ice-water rectal injections, will, in the very large majority of instances, accomplish all that the bath does in the way of good, and are attended with the minimum degree of harm. The greatest benefit, in the cold applications, he holds to be not the reduction of temperature, but the profound modification in the functions of the nervous system (especially the vaso-motor). It is not always agreeable to patients (if they have their senses sufficiently to recognize distinctions), to have cold applied. Especially is this so with children. But very few patients will object to the application of tepid water by means of sponging, or cloths, or the wet sheet. He has succeeded in even reducing the temperature more decidedly by the tepid applications than the cold ones. Certainly, the effects on the nervous system are, as a rule, more beneficial, and these beneficial effects on the nervous system always affect favorably the progress of the fever. Some observers have even gone so far as to assert that almost all the beneficial effects of baths, whether cold or warm, are due to the restoration of the functions of the vaso-motors in the cutaneous capillary network which are so profoundly disturbed in fevers. If this be true, then the tepid applications ought to influence the progress of the fever more favorably than cold ones.

Quinine in small doses increases the strength of the circulation; just how, we do not know, unless it be by its stimulating effect on the nervous system.

In large doses it diminishes the blood-pressure, by weakening the heart, and partly by paralyzing the vaso-motor center, thus causing dilatation of blood-vessels.

The heart's action is weakened by large doses of quinine, from its action on the motor ganglia, and probably also on the muscular fibers of the heart itself. In a discussion before the New York Clinical Society, two years ago, DR. SMITH raised his protest against the large doses of quinine in certain stages of fevers, and in any case with cardiac enfeeblement, as being possibly dangerous, and need only refer to such possibility here. Then we have the salicylic compounds—salicylic acid, etc., and the aromatic series, as represented by kairine, resorcine,

thalline, hydroquinone, etc. And the last, a nondescript, antipyrine. It is an agent which thus far gives better results than any other. It will reduce temperature in almost every case. It has already, with many, displaced cold and quinine. In some instances it produces nausea and vomiting, and occasionally cardiac depression, but those unpleasant symptoms have been produced only by very large doses. During his early use of it DR. S. followed the plan suggested by the German observers, and gave it in large doses, thirty to forty grains every hour, until there was a decided fall of temperature. Now, he finds it necessary only to give ten to fifteen grains, ordinarily, to reduce the temperature two or three degrees. It seems certain that any antipyretic used to the point of producing great variations in temperature might produce unfavorable symptoms, visceral engorgements among the rest. If we would always resist the temptation to cause too great a fall of temperature, even though it be high, we would be more likely to produce good effects and less likely to do harm.

THE USEFULNESS OF SPAYING.

The following is from the Medical Record of the 10th inst. We have read it several times carefully to discover whether our contemporary is really serious, our impression at first blush being that it was indulging in a little of that delicate sarcasm for which it is noted. We have failed, however, to detect enough calculated to warrant any such suspicion, but we still hope that the failure is due to some ineradicable stupidity on our part, for it is scarcely credible that such views can be seriously expressed in this year of grace:

"The attempt of the New York Academy of Medicine to check the practice of spaying is evidently an ill-considered one, and is entirely antagonistic to the progressive instincts of the day. The history of the world shows that the practice in question has always been one of the crowning ornaments of the best types of civilization, from the Chaldean to the Roman age. Now that, after many centuries of gloom, it is again brought into beneficent existence, its critics should beware of thoughtless and shallow opposition. The trouble probably lies in the fact that there still lingers an impression among crudely-educated minds, that the ovaries are organs of social necessity and economic importance. This, however, is a serious mistake. These organs are, it is true, useful for a short period in the existence of a portion of woman-kind for the perfunctory propagation of the race. Aside from this, however, they are not only of no service, but are a source of racial, domestic, and individual distresses of the greatest magnitude. Philosophers of the present day have ascertained several facts which place this view upon a solid and unimpregnable basis. No woman wants more than two children, many only one, and a large per cent., including all the unmarried, not any at all. But in fact the population is increasing at a seriously rapid rate, and the modern economist has had to revive and readopt the views of MALTHUS. In this exigency, when society's needs are antagonized by infant multiplicity, the laparotomist steps in as a kind of saviour from the threatened polypædic catastrophe. The woman has her child, the ovary swells, the learned touch of the gynecologist detects a pyosalpinx, and in a twinkling out comes all the source of a woman's labors and man's unsought paternities. The laparotomist is plainly society's best friend. Like all benefactors of the race, he must endure opposition and calumny for a time; but this noble work of radically removing the sources of over-population will go on, and we calculate that, at the present rate of increase, in fifty years some thirty-five per cent. of women will be permanently relieved of all the worry of maternal anticipation."

Notes.

Some clergymen have such a proper appreciation of the relations of mind and matter as stands them in good stead sometimes in their sacred calling. DR. YEO tells, in the Lancet, of an old Scotch minister who was aroused one night by a summons to the bedside of a great lady who was thought to be dying and whose mind was in dreadful despair. The old man, rubbing his eyes and pushing up his night-cap, inquired: "When were her leddyship's bowels opened?" The answer showed the alimentary canal to be greatly in arrears. "I thocht sae," said the dominie. "Rax me yon pill-box on the mantel. Gie ma compliments to LEDDY MARGARET; bid her tak twa o' these pills, and I'll be ower by-and-by mysel'." When the good man went "ower his sel'" he found that the sense of impending death and the mental agony had departed with the catharsis. "This," says DR. YEO, "was insight; this was true clinical therapeutics."

The American Medical Association meets at St. Louis, Mo., on the 4th proximo. The subject of greatest interest will, doubtless, prove to be the 1887 meeting of the International Medical Congress. The death of DR. FLINT will necessitate the election of a new president of the Congress by the Association committee, and much will depend on its selection. The temper of this committee is such as will, probably, lead it to select a man in very pronounced

harmony with the work which has already been done and which has been the cause of so much disturbance. It would not surprise us to see the choice fall on "the father of the Association."

Diet, not medicine, is what PROF. SCHWENNINGER cured BISMARCK with. His instructions are to eat only of one dish, no matter what that may be. Oysters, lobsters, beef, mutton—eat your moderate fill of that, but touch nothing else at a meal; no vegetables, save, perhaps, a little salad, no sweets, no savories, and do not touch one drop of liquid until half an hour, in some cases an hour, after your meal is ended. There is the *crux* for those who like Chablis with their oysters, Madeira with their turtle, Marcobrünner with their fish, and D. & G.'s Gold-Lack with their first entrée. One dish only, and no drink until long after the meal is over!

ABERNETHY was once consulted by a woman with an ulcer on her arm. "What ails you?" he asked. Without speaking she showed her arm. "Poultice it, and take five grains of blue mass every night. Come back in a week." The woman, still silent, offered him the usual fee, which he declined. At the appointed time the woman returned, and without a word showed her arm, which the surgeon pronounced well. The fee was again proffered and again declined. "No," said ABERNETHY, "I will take nothing. You are the most sensible woman I ever met. You don't talk." A few months afterwards he discovered that the woman was dumb.

The Credé method of prophylaxis of ophthalmia neonatorum, has suggested the injection of a two-per-cent. solution of nitrate of silver into the urethra after a suspicious copulation, as a preventive of gonorrhœa. It must be resorted to within a quarter of an hour after the act, otherwise the pesky gonococcus will have set up the well-known disturbance. It would not be surprising to soon find such a solution, and the necessary syringe, a part of each well-regulated young man's outfit. We are inclined to the belief that a single injection would provoke vows of eternal chastity.

The writers of papers who furnish medical journals with reprints thereof would confer a favor on the editors, and would at the same time be more apt to secure the notice which they desire, were they to summarize their conclusions at the close of the papers. It is a physical impossibility for a single editor to wade through the mass of such literature which reaches him, with a view to picking out from the copious selections from the text-books, such points as may be the result of the author's own experience. Life is too short to be frittered away on such profitless search.

DR. BENJAMIN RUDOLPH EGGEMANN, a homœopathic practitioner of large experience, died in this city last week, at the age of seventy-six. His remains were taken to Buffalo, where they were incinerated. The corpse weighed 135 pounds, the ashes 5. The local cremation society embraces a number of physicians. It hopes soon to have its furnace completed and thus obviate the necessity of citizens going to a distance to have their dead reduced to ashes after the latest and most approved method.

The Kansas City Medical Record gets back on the St. Louis Medical Society, which refuses to allow its proceedings to be published in medical journals, after this fashion: "We venture the assertion that there is not one-tenth of the last year's discussions that the medical journals would care to publish." It thinks that a verbatim report of the proceedings of the society would be a "daisy." It must gall the silver-tongued orators not to have their efforts published. What else do they attend meetings for?

DR. HORATIO R. BIGELOW, with whom our readers are quite familiar, is abroad drumming up an interest in the coming International Congress. He reports to the Journal of the American Medical Association that, "the enthusiasm here (Vienna) grows daily, and I am quite sure Vienna will send a large delegation to Washington. I hope to be able to establish equal interest in Buda-Pesth and Munich." Doubtless, our European brethren are much interested in this American plan of drumming up a crowd.

The Medical Record holds that seventy-five per cent. of society discussions is rubbish, and and that medical journals cannot publish them in full and live, and that no society can long force upon the public, by "Transactions" or "organs" material not worth publishing. We are much pleased to note this expression from such a source. Would that the secretaries of all the societies whose proceedings we have "respectfully declined," might frame it and hang it up conspicuously before the members at each meeting.

VOGEL, in his "Diseases of Children," tells a story illustrative of the influence of the American mother's milk on the precocity of the infant. He once treated an American mother who still sucked her child who was then two and a half years old. One morning when called to be nursed this infant politely declined, saying: "No, I thank you, dear mamma, the nursing is too tedious for me." The mother was then convinced that she had better wean the prodigy.

The St. Louis Medical and Surgical Journal gives an account of the removal of a brass ring from the penis of a boy, after amputation had been suggested by an eminent surgeon as the only remedy, by immersing the member in a bowl of metallic mercury. In a few minutes the ring which had been so imbedded in the tissue as to become invisible, crumbled out in pieces of amalgamated brass from the sadly disfigured organ. The hint is an exceedingly valuable one.

The Cincinnati Medical News is wroth, its equanimity having, doubtless, been disturbed by some subscriber who believes in the communistic principle of getting all one can without returning a *quid pro quo*. In the fullness of its wrath it declares that "a physician who does not pay for his journal is not fit to practice medicine. He had better be engaged in driving mules, and let his M. D. stand for mule driver." That is very severe on a very large class, but not entirely unjust.

The Sunny South generously advertises that it will give a first-class obituary notice, gratis, to such of its readers as are in arrears a year or more, should the reaction from the depression from which they must be suffering terminate fatally. Not to be outdone by the Southern contemporary, our publisher will furnish a cut to accompany similar notices of any of our subscribers who may die under similar circumstances.

The Kansas City Medical Record makes very damaging assertions touching the professional character of a physician whom it was our pleasure to know, and esteem very highly for his ability. We are at a loss to divine the circumstances, the pressure of which has caused this man, so eminently qualified to adorn the profession, to join the ranks of the quack and impostor. "Let him that standeth take heed lest he fall."

Professor Austin Flint had been selected to deliver the Address in Medicine before the next meeting of the British Medical Association. The well-known fitness of Dr. J. S. Billings for the task, caused the Association to to look to him on Dr. Flint's death, and we are pleased to note his acceptance. It is safe to predict that he will give our British brethren something rich, racy and rare.

The Gazette des Hopitaux contains the startling news that a M. Longue has discovered that the pulse is more frequent when sitting than when lying, and still more frequent when standing. The startlingness of this news is, moreover, very much augmented by the fact that it is republished in all seriousness by an American medical journal.

The late Professor Laycock was very fond of drawing attention to hereditary peculiarities. On one occasion he was interrupted by a woman who had been listening to his minute tracing of the similarities between herself and the child which had been brought to his clinic, with the declaration that she was "no the bairn's mither, but just its step-mither."

Voltaire: Nothing is more estimable than a physician who, having studied nature from his youth, knows the properties of the human body, the diseases which assail it, the remedies which will benefit it, exercises his art with caution, and pays equal attention to the rich and poor.

The eyes of a comatose person are said to move independently of each other, one usually moving outwards while the other remains still, though sometimes both converge. Strabismus is, of course, to be excluded in noting these signs, which often precede insensitiveness of the conjunctiva.

Sir Henry Thompson holds that artificial teeth are an evil in those of advanced years, because they enable such persons to masticate flesh. When the teeth fail naturally it is nature's design that the individual should subsist on vegetable diet.

A New York physician boasted at a dinner party, that he had no fear of trichinæ, because he cured his own hams. A lady who was present mildly suggested that she had rather be his ham than his patient.

Socrates: The best man is he who most tries to perfect himself, and the happiest man is he who most feels that he is perfecting himself.

Dr. T. Gaillard Thomas announces that he has removed from 294 Fifth Avenue, New York, to 600 Madison Avenue, between Fifty-seventh and Fifty-eighth streets.

Professor Parvin recommends as a remedy for the salivation of pregnancy, the smoking of the fourth of a cigar several times a day.

Book Notices.

A Reference Handbook of the Medical Sciences, embracing the entire range of Scientific and Practical Medicine and Allied Science, by various writers; illustrated by chromo-lithographs and wood engravings; edited by Albert H. Buck, M. D. Vol. II.
William Wood & Co., New York.

This volume of this incomparable work on medicine and such collateral science as is more directly of benefit to the practitioner, is fully up to the standard of excellence on which the

first volume was constructed. Anything like an adequate review of a work of such magnitude and covering such a diversity of subjects, would be clearly impracticable, and it must suffice for us to barely mention the fact that in our examination of it we have failed to detect the omission of any practical subject in medicine whose title would be embraced in the alphabetical order between "C" and "E," inclusive. In the treatment of these subjects, moreover, conciseness and exhaustiveness are happily combined. The illustrations, wood-engravings and chromo-lithographs, are of the highest order of art, and are quite in keeping with the mechanical execution of the work, letter-press, paper and binding, throughout. The physician who has not subscribed for this work, has failed to provide himself with an invaluable library of reference.

A Compend of the Practice of Medicine. By Daniel E. Hughes, M. D., Demonstrator of Clinical Medicine in the Jefferson Medical College, of Philadelphia; Fellow of the College of Physicians, of Philadelphia. Physicians' edition. Based on the Revision of the Quiz-Compend Edition, and including a very complete section on Skin Diseases.
Philadelphia: P. Blakiston, Son & Co.

This small octavo volume of 400 pages, consists of the briefest possible statement of the points of scientific and practical interest in connection with all the diseases on the nosological list. The salient features of such diseases and their treatment are thus laid before the reader in a shape which permits of their being taken in at a glance. The author has displayed both ingenuity and research in his work, and the book is one which possesses advantages which redeem it from the objections which are with so much reason urged against the short cuts to knowledge which so largely abound. While it cannot be recommended as a substitute for the more elaborate treatise, it must prove a valuable auxiliary from the fact that it will suggest much which one would not be apt to look for, and would be liable to overlook, in such consultation of the voluminous treatise as he might think necessary in connection with an interesting case.

The Principles and Practice of Surgery. By Frank Hastings Hamilton, A. M., M. D., LL. D., Late Professor of the Practice of Surgery, with operations, and of Clinical Surgery in Bellevue Hospital Medical College; Consulting Surgeon to Bellevue Hospital; to the Bureau of Surgical and Medical Relief for the Out-door Poor, etc. Illustrated with 472 engravings on wood. Third edition, revised and corrected.
New York: Wm. Wood & Co.

It requires no words of ours to instruct our readers regarding either Prof. Frank H. Hamilton or his works. His name is familiar to the profession as that of one of the most able surgeons and most polished writers on this side the Atlantic, and his works (especially that on Fractures and Dislocations and the one before us) have become classic in the literature of medicine. If it is possible to compress the science and art of surgery into an octavo volume of a little less than a thousand pages, it will be generally conceded that there is no one more competent to the task than this author —a man with a genius for surgery and a faculty for imparting knowledge thereof, possessed by few, if any, of the surgeons of the present day.

The Diagnosis and Treatment of Diseases of the Ear. By Oren D. Pomeroy, M. D., Surgeon to the Manhattan Eye and Ear Hospital; Ophthalmic and Aural Surgeon to the New York Infant Asylum; Consulting Surgeon to the Patterson Eye and Ear Infirmary; Member of the American Ophthalmological and Otological Societies, etc. With one hundred illustrations. Second edition revised, with additions.
New York: D. Appleton & Co.

We took occasion in noticing the first edition to point out the excellence of this work. We are pleased to note that a second edition has so soon been called for. The fact is a strong endorsement of the book, which now appears with the necessary additions and changes to bring it abreast of the times. To those seeking further information regarding the ear and its diseases, than is furnished in the ordinary text-books, we commend this volume.

Medical Progress.

The Use of Bromide of Arsenic in Skin Diseases.—Having almost unconsciously drifted into some of the journals in connection with the use of the bromide of arsenic in certain diseases of the skin, it may be of sufficient interest to give more in detail my limited experience with the drug.

In the first place, it is of prime import that we have a definite idea as to what we are giving when we prescribe the arsenious bromide. It is formed from the two elements in the presence of carbon disulphide; it is colorless, crystalline, and of a peculiar garlic odor. It is deliquescent and on contact with water is instantly decomposed, arsenious acid (As_2O_3), or white arsenic, and hydrobromic acid (H. Br.) being formed; therefore the arsenious bromide, as found in the shops, is incompatible with water, be it ever so little, and dangerous as a medicament.

A solution of bromide of arsenic introduced many years ago by Dr. Clemens, of Frankfort-on-the-Main, the formula of which is published in the "National Dispensatory," contains one part each of arsenious acid and pure potassium carbonate dissolved in ten parts of boiling water, to which eighty parts of water is added and two parts of bromine. After this liquid has become colorless by standing, sufficient water is added to make one hundred parts, which makes it of the same arsenical strength as Fowler's solution. But this solution, according to trustworthy authority, consists of bromide and arseniate of potassium. Mr. Hoppe informs me that "in Clemens' solution

the bromide of arsenic cannot exist as bromide of arsenic, it being decomposed by contact with water." The solution of this question, however, belongs to the domain of the chemist; let me say a few words as to the therapeutic effect. CLEMENS' solution was first given to the profession in 1860 (Gazette des Hôpitaux, No. 11).

Later, in 1875 ("ZIEMSSEN'S Cyclopædia"), DR. HERTZ recommended it in chronic malarial poisoning; he adduced in its favor that it could be taken a long time without producing unpleasant symptoms. From its supposed chemical status it is quite probable that it might.

The only real solution of arsenious bromide which I have met with is the alcoholic solution recommended by DR. H. G. PIFFARD.* He directs that one part of arsenious bromide be dissolved in one hundred parts of alcohol, of which one to two minims may be given in a wine-glass of water after meals. Of late I have used the following formula prepared for me by MR. LOUIS HOPPE, to whom I am indebted for some valuable and timely suggestions relative to the drug:

℞ Arsenici bromidi (Mercks), gr. j.
Alcoholis, ʒ ij.
Solve et adde
Elix. simplicis, ℥ iij.

M. Sig.—A teaspoonful to be taken in water after meals, gradually increased.

The bromide of arsenic was first employed in the treatment of cutaneous diseases by DR. H. G. PIFFARD, who, in 1881,† spoke favorably of its use in acne; since then little has been said of it. My first experience with the arsenious bromide—or what I thought to be arsenious bromide—was in a rather obscure case of psoriasis‡ which I saw through the courtesy of DR. Z. T. DELLENBAUGH. The patient was taking CLEMENS' solution in two-minim doses after meals, to which chrysarobin (grs. xv. to vaseline ℥ j.) was suggested as an external measure, whereupon the eruption cleared up and to my knowledge has not returned since. The favorable termination of this case in about eight weeks, after it had resisted able treatment other than the combined use of CLEMENS' solution and chrysarobin, induced me for a time to follow this method in all cases of psoriasis. To determine the relative value of the two drugs, in September, 1884, four cases were treated with the internal use of CLEMENS' solution, gradually increasing the dose to six minims, and four other cases with the inunction of chrysarobin. It did not take long, however, to settle the point as to their relative value; of the first series some improved slowly, others not at all, and the result was unsatisfactory; whereas the second series, or those using the chrysarobin inunction, improved as readily as the cases previously treated with the internal and external methods combined. Since then I have used the formula herein given, but with what success I am not prepared at present to say. My impression is that psoriasis treated with the alcoholic solution of arsenious bromide is less liable to return than it is when treated solely by external means—but of this later.

*Journal of Cutaneous and Venereal Diseases, New York, March, 1884.

†Materia Medica and Therapeutics of the Skin, Wood's Library.

‡Journal of Cutaneous and Venereal Diseases, July, 1884, with Lith.

In acne vulgaris marked improvement has followed its use in my hands, but only in cases of reflex origin, as I take it, from undue irritation of the reproductive organs in neurasthenic persons. A marked case of this kind was reported in the Columbus Medical Journal of October, 1883, in which acne appeared in a female aged twenty, at the time of her becoming a *fille de maison de joie*; this patient returned to the Dispensatory for Skin Diseases from time to time, but treatment proved unavailing until, September, 1885, she was given arsenious bromide, gr. $\frac{1}{65}$ increased to gr. $\frac{1}{45}$, when she made a speedy recovery. For a time there was a tendency for the disease to return at each menstruation, but this yielded to the increased dose last given.

In another case of a like nature, in a male aged nineteen who contracted gonorrhœa, the history shows the following points of interest: The active discharge from the urethra subsided into what the patient termed the "gleet," accompanied by a copious eruption of flesh-worms on the forehead. I saw him for the first time in August, 1885, at which time the urethral discharge had disappeared, but the acne, in spite of treatment, was persistent. The patient thought a vestige of the "gleet" still remained, as the lips of the meatus were sometimes adherent of a morning. A No. 24 French sound passed into the bladder readily and without pain, although the entire tract was hyperæsthetic, whereupon I assured him he had nothing to fear from gleet.

He was directed to keep the forehead clear of comedones by squeezing them out daily, and to apply the following lotion at night:

℞ Hydrargyri chlor. corrosivi, gr. iij.
Glycerini, ʒ iv.
Tinct. benzoini, ʒ iv.
Aquam rosam adde, ℥ vj.
M.

This he followed faithfully for six weeks, and returned worse than before; he was then put on the arsenious bromide, gr. $\frac{1}{72}$, as an additional measure, and directed to continue externally as before, a fortnight afterward the acne began to improve; a week later it was found necessary to increase the dose, which was gradually increased to gr. $\frac{1}{50}$, and finally to gr. $\frac{1}{45}$, before recovery was complete. The treatment produced no marked gastric disturbance at any time, and the patient said he had never felt better, Time of treatment with the arsenious bromide, nine weeks. There has been no return of the disease since. In pruritus hiemalis, or winter-prurigo, the drug seems to be of equal, if not greater, service. The treatment of this affection, which is so common along the chain of lakes, has given medical men more annoyance and less reputation than almost any other affection. External treatment may relieve for the time, but the average patient, according to my experience, objects to spend much time frescoing his legs when the objective symptoms are so slight; besides, the paroxysms in the more severe cases come on during sleep, when the finger-nails are applied unconsciously. For two or three winters preceding the present, a number of cases under observation have taken the potassium bromide with but partial success, because it was found extremely difficult to get them sufficiently

under its influence for a malady that gave annoyance only once or twice within the twenty-four hours. Less inconvenience and better results were noted to follow the use of hydrobromic acid, yet here again the full therapeutic effect was objectionable.

Theoretically, in October last, the bromide of arsenic was given two patients who had yearly, upon the first approach of frost, suffered from pruritus; the treatment was begun several weeks before the usual advent of the disease, beginning with gr. $\frac{1}{96}$ after meals; as the weather grew cooler the dose was increased to gr. $\frac{1}{50}$, which had been maintained in one case to within a fortnight of the present writing, the patient remaining entirely free from the pruritus. In the other two or three slight attacks have followed prolonged exposure to cold, but these were allayed by the local use of liquor carbonis detergens (℥ ss. to ℥ iv.), which had previously been used without benefit.

In two other cases in which treatment was applied for after the discomfiture had become sufficiently severe to prevent sleep, it was found necessary, in addition to the arsenious bromide, to employ a solution of caustic potash (gr. x.-xx. to ℥ j.) externally to give immediate relief.

In brief, I have endeavored to outline a few instances in which the bromide of arsenic has, to all appearances, fulfilled what other drugs have repeatedly failed to accomplish; at the same time I am well aware that impressions rather than opinions are justifiable from the meagre data at my disposal. In the *neuroses cutaneæ*, which American physicians are destined to encounter more, and to more fully appreciate, there is a dearth of drugs to meet certain indications which are brought to light by the unravellings of clinical and pathological research; in this direction it seems to me the one under observation will find its proper scope.—WM. THOMAS CORBETT, M. D., in the *Medical Record*.

REPORT ON NEW THERAPEUTIC AGENTS.—In a report published in the April, 1886, number of Edinburgh Medical Journal, by J. LINDSAY PORTEOUS, M. D., F. R. C. S., Ed., appears the following notes regarding remedies, some of which have been extensively tried by American practitioners:

Grindelia Robusta.—This, in the form of a tincture, is an excellent tonic expectorant, especially in chronic bronchitis. It is also useful in pneumonia, and almost a specific in asthma. Along with quebracho it greatly relieves the patient during the attack, and lengthens the period between the attacks. The use of iodide of potassium and liquor arsenicalis, vaunted so much by some medical men as a cure for this malady, does, in my opinion, more harm than good.

Tincture of Quebracho is very serviceable in the emphysema of pleurisy. It seems to have a decided power to lessen the respirations and dyspnœa. It is said to be beneficial in phthisis and mitral regurgitation, but of this I have had no experience. The relief it affords in dyspnœa is supposed to be due to its power to increase the strength of respiration, thus facilitating the supply of oxygen. I generally give 15♏ to 20♏ for a dose.

Tincture of Coto, made from the bark of a tree growing, I believe, in Bolivia and Brazil, I have found an excellent remedy in some forms of diarrhœa, especially in children. The only objection to its use is that it is rather hot, and should be well diluted.

Naphthalin.—This I have found of great service in the treatment of ulcers. DR. PROUDFOOT was consulted by a patient who had an ulcer on one of his legs, measuring 8 inches by 5 inches. The patient stated that he had had it for over fifteen years. His age was 35. He had consulted many surgeons, both private and hospital, but never derived much benefit. DR. PROUDFOOT blistered the edges, and ordered naphthalin to be dusted on the surface of the ulcer twice daily. At the end of the fourth week of the treatment, the ulcer was entirely healed; and now (two months) there remains nothing but the mark where it was.

Chekan.—As a liquid extract it is excellent in bronchitis and laryngitis.

Tincture of Guarana has become very popular amongst many of my patients who suffer from sick headache. It can be given in doses of 20♏ every fifteen minutes; or, better still, ℥ j every hour.

Sanguinaria.—As a tincture I have found it very useful when the tongue presents a yellow appearance. It seems also beneficial in some forms of jaundice.

Cascara Sagrada.—This drug is now almost too well known to the members of our profession for me to mention. It is, doubtless, the best remedy for habitual constipation that has ever been discovered. I mention it, however, because I have been obliged to forbid its use to two of my patients, on account of its causing blood to come with the stools. Perhaps others have had the same experience.

Berberis Aquifolium (Barberry).—This has been famed for long as a cure for jaundice. Along with a decoction made from the globe artichoke I have seen excellent results.

Antipyrine.—I have found this new antithermal very useful in acute rheumatism, pneumonia, scarlet fever, and, in fact, in all cases of high temperature. It not only reduces the temperature, but causes a moisture on the surface, followed by pleasant sleep.

Tincture of Jaborandi promotes secretion of the sweat glands in rheumatism and nephritis of scarlatina. It is especially useful in the latter; but I have found that it must not be often repeated, or it will cause greater distress. It lessens the quantity of urine.

Jamaica Dogwood (*Piscidia erythrina*).—This is said to be a specific in facial neuralgia and pertussis. I have found it to do good in one case of persistent sciatica. It is an effective anodyne and sedative, with no disagreeable after-effects.

Ethylate of Sodium.—We have tried it in two cases of nævi. The nævi were painted with it once in twenty-four hours. When again seen they were blackened, and had a shriveled appearance. A second time it was applied, and at the end of three days the blackened crust fell off, leaving little trace of the original mark.

Osmic Acid, or Hyperosmic Acid, or Tetroxide of Osmium.—Used as a one-per-cent. solution, it has proved most useful in cases of obstinate sciatica. In one case in which it was used, the patient had suffered excruciating

pain for ten months. He could neither work nor sleep for any length of time. Blistering, morphine, and the battery were tried with only temporary relief. Osmic acid was injected once day for three consecutive days, then every alternate a day for a week, the result being perfect freedom from pain; and now three weeks have passed, and there has been no return.—*Edinburgh Medical Journal.*

Black-Haw in Abortion and Miscarriage.—We have before reported cases in which virburnum prunifolium prevented miscarriage.

Very strong additional proof of its efficacy is now presented by Henry Wilson, M. K. Q. C. P., M. R. C. S. E., who in the April 3d number of the British Medical Journal says:

"In the number of the Liverpool Medico-Chirurgical Journal for January, 1885, I reported six typical cases treated successfully by this medicine; and since then, after considerable experience, I have been more and more confirmed in its value. I cannot say it has always succeeded, but in those cases in which it failed, I have been able to account for its doing so. Either the medicine has not been commenced in time, and the ovum has been detached before the viburnum has been taken, or there has been some reason to suspect a syphilitic taint; and, in a case of fatty degeneration of the placenta, after not succeeding with the viburnum alone, chlorate of potassium was taken in addition, with a good result.

Dr. Napier says, 'some women abort on the slightest provocation,' and they continue to do so, although every care may have been taken in the way of rest, medicine, etc., to prevent it. I have had many such cases, and have been greatly disappointed; but when I have had the opportunity of commencing the viburnum shortly before the anticipated period, and continued it at intervals on the first appearance of threatening symptoms, these patients have invariably gone on to the full time, and done well, without being subjected to restrictions or debarred from active exercise.

In the next class of cases, where there may be reason to suspect even a partial separation of the ovum and a dilated external os, with severe pains and hæmorrhage going on for hours, and the patient under the impression that she could not possibly go on to her full time, and when I had almost despaired of any benefit from the medicine, I have been astonished at its effect, more than three-fourths of these cases doing well.

The most sanguine advocate of viburnum could not expect it to do impossibilities, or to prevent abortion when there is a 'a gaping os, and a detached ovum presenting.' One might as well expect to resuscitate a dead body by galvanism.

I have never seen ill consequences follow the administration of the medicine, however often the dose has been repeated. In two cases only has it been followed by slight headache. One patient inquired if she had not been taking quinine. The symptoms had been relieved; therefore it was not continued. In the other case, the patient had taken four grains of the extract every two hours. The only change was to extend the interval to four hours, and then gradually discontinue it.

Some patients have taken viburnum at intervals during the whole course of their pregnancy. It seems to act as a uterine tonic and sedative, and to relieve the woman of those harassing nervous forebodings which often lead to abortion. The patient, after taking only a few doses, has quite a changed expression. From a drawn, despondent look, her countenance becomes cheerful and happy.

Since I have prescribed viburnum, it has not been necessary to keep the woman in the horizontal position for more than a few days; whereas, under the old treatment, they occasionally spent weeks in bed, and, after all, abortion has taken place.

On some of the plantations in America, it is the popular belief a woman cannot abort if she be under the influence of black haw, although she may be taking medicine with a criminal intent. My experience would go far to confirm that opinion, for I have had patients in whom a succession of abortions has taken place, but, when under the influence of the medicine, they have been able to resist the severest tests — frights, falls, strains, etc.— and no ill effects have followed.

With regard to the mode of administering the drug: at first the liquid extract was ordered, but the smell was so strong and objectionable, that the whole house became impregnated; and in two cases, where the stomach could not retain it, the liquid was given as an enema.

I now order the extract in pills of four grains, and find it a convenient form; as usually made, they soon absorb moisture, and run into a mass; but I now advise them gelatin-coated, as prepared by Parke, Davis & Co., of Detroit, who seem to have been the first to have introduce this medicine to the profession. These pills keep any length of time, and I advise my patients to keep a supply of them.

I have such confidence in viburnum prunifolium that I am anxious the profession should give it a trial, feeling assured that they will not be disappointed.

On some Modern Remedies in Heart Disease.—By A. Ernest Sansom, M.D., Lond., F.R.C.P.—From an article on the above subject published in the London Lancet we excerpt the following:

1. *Digitalis.*—It is a matter of experience with others as well as with myself, that digitalis may not be given in mitral stenosis with the same advantage as in mitral regurgitation. It may often do good if given for periods of a week, with intervals of at least equal length, but it should always be used with caution. In many cases, instead of promoting regularity of the heart's action, it notably increases irregularity. On this point I entirely concur with Dr. Broadbent.* The search, therefore, for a more satisfactory therapeutic agent in such cases is very desirable. We will proceed to examine the evidence in the cases treated by—

2. *Convallaria Majalis.*—In cases of mitral stenosis convallaria exercised a pronounced diuretic effect. In all cases the quantity of urine was augmented during its administration. In most of the cases there was no oliguria at the end of the treatment, but the evidence here

*Cf. "Mitral Stenosis." International Journal of Medical Science, Jan., 1886, p. 85.

as well as that in the cases of mitral regurgitation renders it probable that the drug may, after the maintenance of a maximum blood-pressure in the renal arterioles, so constrict these as to impede the blood-supply. It will be well, therefore, with convallaria, as with digitalis, to suspend the administration at intervals. It is a fair conclusion that convallaria is an important diuretic in cases of mitral stenosis, comparable in its effects with caffeine in mitral regurgitation, and that its effects in this direction are more pronounced in the obstructive than in the regurgitant lesion. We will now consider the cases of mitral stenosis in reference to the

Effects of convallaria on the pulse and respiration.—In one case the pulse-rate progressively fell under ten-grain doses of the convallaria extract, from 112 to 80, 76 and 72, and after suspension of the drug rose to 92, to again fall under digitalis to 70. In another case the pulse-rate which under ten-minim doses of tincture of digitalis had increased from 99 to 110, decreased under convallaria to 102 and 64, rising after the suspension of the drug to 72 and 120. The sphygmographic evidence is more valuable and more conclusive from the mere observation of the rate of the pulse.

The breathing was improved under the drug in nearly all the cases; in one case there was severe dyspnœa, which lasted during a fortnight (in this case bronchitis and emphysema existed in marked degree), but afterwards there was gradual improvement, and the patient left the hospital free from all distressing symptoms. It was evident that in these cases the drug acted very favorably. Only one case died in hospital; in this pericarditis and severe pulmonary complications were manifested; the patient improving during the time that convallaria was administered, and the temperature was reduced from 101° to normal, but after the omission of the convallaria the temperature rose to 103°; the patient died suddenly after having for a time considerably improved.

So far as I have been able to judge, convallaria compares favorably with caffeine in the treatment of mitral stenosis. In one case a girl, aged seventeen, in whom there existed tricuspid regurgitation in addition to mitral stenosis and regurgitation, the quantity of urine rose from a maximum of 30 oz. to 54 oz.: but in regard to the pulse and respiration there was no perceptible influence. In another case of stenosis with œdema, the daily urine rose only from 36 oz. to 40 oz., and here also the pulse and respiration were not perceptibly influenced; the patient died. I was not encouraged to repeat the treatment by caffeine in the cases of mitral stenosis whilst I obtained such good results with convallaria; but in cases of this affection manifesting œdema or ascites, where a diuretic effect could not readily be obtained by convallaria, I should administer caffeine in addition.

My general conclusions are that caffeine is an agent of great value in the treatment of cases of mitral regurgitation, especially those in which there is much dropsy; and that convallaria, though manifesting no very favorable influence in cases of mitral regurgitation, except as an occasional substitute for digitalis, is of considerable therapeutic importance in mitral stenosis.

Coffee as a Disinfectant.—Years ago some studious German made the observation, the correctness of which he endeavored, and to a great extent also succeeded, to establish, by statistical data, that coffee, if taken early in the morning on an empty stomach, acted as a preventive against infectious and mainly acute epidemic diseases. He quoted a great number of cases where individuals accustomed to drink a cup of hot coffee for breakfast, had either escaped an epidemic of typhoid then ravaging the part of Germany in which the observer lived, or if attacked by the disease, contracted it in a much milder form; while all those who died from the disease had not been in the habit of taking coffee in the morning. This was a good number of years ago, at a time when in many parts of Germany coffee was still either an unknown, or so costly a beverage as to be looked upon as a luxury that only the rich could enjoy. We have forgotten the name of the physician, but remember that the medical profession did not take kindly to the idea of coffee being a disinfectant, or as they then said, an anti-zymotic, and those who could not deny the correctness of the observation itself, ascribed the apparent immunity to other causes, many to the hot water with which the coffee was prepared.

That the physician, however, has not been so wrong, has been but recently proved. During the last meeting of the Prussian army surgeons in Berlin, medical director Oppler reported that after extensive investigations, which he related in detail, he had discovered that we possess in coffee an antiseptic remedy of no mean value, but one which could well serve for the purposes of a first dressing of a wound received in a battle. If employed at once it totally prevented suppuration, but if used after pus has already accumulated in the wound, it leads to the formation of a scab, beneath which the wound heals with complete asepsis. The coffee should be employed in the form of a powder, and as it might entail the loss of valuable time to have to grind first the roasted coffee bean, which in Prussia every soldier is bound to carry with him, O. recommends the use of caffee-tablets, which have been recently discovered by a Hamburg firm, and which answer their purpose admirably well, as it is only necessary to rub these tablets a little, when they at once assume a powder form.

Dr. Oppler presented two cases at the meeting, where an injury of the head, accompanied by a great deal of laceration of the soft tissnes, had been treated with powdered coffee alone, and when the wounds had healed as well and as quickly as under strict aseptic treament. He applies the coffee in a similar manner as gypsum is used in bandaging, viz.: he takes a gauze-bandage and partly spreads the powdered coffee over it, partly presses it into the bandage, with which the wound is to be covered.

He also made some experiments with urine, blood, glue, and meat, which under the aseptic influence of coffee he managed to preserve for a long time in an unaltered condition. A colleague of his employed a salve, to which coffee had been added, in two cases of eczema, connected with a great deal of moisture, and in both cases a rapid cure resulted.

The aseptic action of coffee seems to be less

due to the caffein than to the aromatic constituents, which are set free when coffee is roasted. Considering the cheapness of coffee and its easy procurement, OPPLER's discovery may yet prove of great value.—*Med. and Surg. Reporter*, Apr. 10, 1886.

ATROPIA HYPODERMICALLY TO PREVENT THE HEART DEPRESSANT EFFECTS OF CHLOROFORM.—Medical men are well aware (some painfully so) of the fact that the administration of chloroform is a dangerous procedure, excepting, perhaps, in obstetrical cases, and are very reluctant in giving it in general surgical practice, because of its paralyzing action upon the heart. Probably every medical student in America has been warned, emphatically, during his college course, about the danger of administering chloroform; indeed, so great stress is put upon it that many enter practice with the determination never to try it, and I have met with physicians who have been in active practice for a number of years, and who have told me they had never yet dared to give chloroform. I, myself, started out with the same determination, but I soon found that time was too precious and the effects of ether too disgusting to hold me to the old resolution; therefore, I began anew the reading of therapeutics and physiology, with the view of finding some drug which might counteract the effects of chloroform or be antagonistic to it. I began to experiment practically, by trying spirits of ammonia aromat, brandy, and all the cardiac stimulants; but in many cases (the usual percentage) the lips and nose were as blue as though I had used no stimulant, and the pulse as small and weak. I investigated thoroughly the physiological action of nearly all the prominent drugs in the materia medica and studied their action upon the different structures, especially the brain and spinal cord, and the result was a choice of belladonna.

Now, this drug is physiologically antagonistic to chloroform, it paralyzes the termination of the pneumogastric nerve in both heart and lungs—as proven by DRS. RINGER, H. C. WOOD and others—and stimulates the sympathetic, which is exactly the reverse action of chloroform. I therefore concluded to try the hypodermic injection of one-twentieth of a grain of atropia at the next opportunity and watch the result. The subject was a lady, having already a weak heart and in a run down condition from the effects of malignant disease of the breast (the skin being considerably involved). I gave her the above dose of atropia hypodermically, and then began the administration of the anæsthetic. She took it without a murmur; there was no trouble in breathing, no blue lips or nose, and the heart's beat was regular and even stronger than usual, and I completed the operation without a single bad symptom.

This was the first encouragement, and I concluded to try it in every case where an anæsthetic was needed, which I did, with similar results.

Care must be exercised, however, against too large doses of belladonna, lest the sympathetic nerve force become exhausted by over-stimulation.—DR. J. C. KERR, in *So. Cal. Prac.*

TREATMENT OF HERNIA BY INJECTIONS OF OAK BARK WITHOUT CONFINEMENT TO BED.—In an article on the treatment of hernia by W. B. DEGARMO, M. D., published in the Med. Record April 3d, 1886, the author alludes as follows to the use of injections of oak bark, viz:

In closing this somewhat disconnected paper, I desire to bring before you a method for which I expect, at a later date, to claim an important place in the list of means at our command for the palliative treatment of hernia.

I expect to make even broader claims for it, as my experience confirms me in the belief that in this method, combined with the skilful mechanical treatment of hernia, we have the means which will afford the greatest relief, and produce the largest number of cures attainable.

I refer to the injection of the extract of white oak bark into the inguinal canal, in quanties of from five to ten minims, repeated at intervals of about two weeks, and this without confinement to bed, or detention from ordinary business.

The fluid used is after the well-known Heaton formula, and the injection is made into the outside the hernial sac.

The patient is first supplied with an accurately fitted truss, which shall retain the hernia as perfectly as possible; after this has been worn for about one week the first injection is made, and is made in the following manner: With the patient in the recumbent posture, the end of the forefinger of the right hand is passed into the external ring by invaginating the scrotal tissues, the cord and sac being held to the outside of the finger. The forefinger of the left hand is now pressed firmly over the end of the finger that is in the ring, and as the latter is withdrawn, the former is pressed directly into the ring. The needle is passed at the end of the left forefinger directly into the canal, and the fluid gradually deposited. Where the subcutaneous tissues are thin, an ordinary strong hypodermic needle is used, but in cases with a thick deposit of adipose tissue covering the external ring, the hernial syringe described by me in the Medical Record of February 7th, 1880, is employed.

Slight discomfort follows the injection, which usually continues for two or three days, and the parts are sensitive for a week afterward. The truss is worn constantly, even at night, if too much discomfort is not produced. As the injections are repeated the truss-pressure is reduced.

I make this preliminary report on this method merely to place it before the profession, that others who so desire may also use it. My first case was treated by this method two years since, and resulted in a complete cure after five injections. I have used it for the past year at the Polyclinic, and with results which warrant my bringing it before you.

I have now in course of preparation a paper on the "Treatment of Hernia by Injection," which will include full particulars respecting this method.

CONSTIPATION AND ITS TREATMENT.—The causes of constipation may be either local or general.

Under the local causes we may include pressure on the intestines by tumor from without, as in the gravid uterus; growths in the

wall of the intestine, as in cancer; and obstruction of the canal by means of the fæces, intestinal worms, etc.

Under the general causes we include sluggishness of function, as in anæmia and the lymphatic temperament; sedentary habits; too great muscular activity; prolonged mental application; the continued use of aperients; the abuse of alcohol and tobacco; and general errors in diet. All these tend to produce constipation by causing dryness and hardness of the contents of the intestine from deficient secretion or too active absorption of fluid from the intestinal tract. There is usually present at the same time deficient muscular contraction of the muscular coat of the intestine, and this naturally increases constipation when the fæces are already hard and dry.

When constipation is once fully induced the evacuations are infrequent, solid, and deficient in quantity. They are hard and dry, and usually dark in color, and the depth of the color is greater the longer the fæcal masses have been retained within the large intestine. The tongue is coated, the breath fœtid, and there is usually a certain amount of acidity and flatulence, lassitude of body and mind, headache, and a hot sensation at the top of the head.

We will only mention the treatment of the general causes of constipation, as these are the most common, and, as a rule, less serious than the local causes.

Attention must, of course, be paid to diet, and to the general surroundings. Moderation in eating and drinking, and a certain amount of daily exercise, without any purely medicinal remedies, will often have the desired effect. A tumbler of hot water, taken twice daily one hour before food, aids the mucous ecretion from the bowels and increases the peristaltic action. In the majority of cases, however, such simple remedies are of no avail, and recourse must be had to medicinal remedies. Active purgatives, as a rule, are to be avoided, as, although giving relief for one or two days, they are usually followed by more obstinate constipation. An enema of half a pint of olive oil nightly, and retained in the bowels during the night, frequently produces an easy evacuation in the morning.

Many drugs, such as quinine, iron, nux vomica, and belladonna are useful. Within the last two years, much benefit, and frequently perfect cures, have been obtained by the use of the liquid cascara sagrada (PARKE, DAVIS & Co.) It should be given in tonic doses of from ten to twenty drops, in a wine-glass of water, three times daily, before food. A single large dose taken in the morning does not give the same satisfactory results, and frequently does harm. The use of the drug in the tonic doses above described may be continued for several months at a time, and the dose does not require to be increased; and in many cases it may be found actually beneficial to diminish the quantity taken each time.—*Health.*

ACTION OF GRINDELIA ROBUSTA ON THE HEART AND CIRCULATION. — Following the suggestion of PROFESSOR S. P. BOTKIN. DR V. P. DOBROKLONSKY, of St. Petersburg, has undertaken (Ejenedelnaia Klinitcheskaia Gazeta, No. 34, 1884. p. 535) a series of experiments on frogs, in order to examine the action of fluid extract of grindelia robusta (PARKE, DAVIS & Co.) on the heart and circulation. The main results may be summarized as follows: 1. In small pharmacological doses (0·1 to 0·2 cubic centimetre) the drug causes a slight and fleeting quickening of the heart and an increase of the arterial tension, lasting for several tens of minutes. 2. In large pharmacological doses (0·4 to 0·6 cubic centimetre) it decreases both the frequency of the heart and the arterial tension, the heart ultimately stopping in diastole. 3. In moderate pharmacological doses (0·2 to 0·4 cubic centimetre) the drug, in the beginning, slightly quickens the cardiac contractions and elevates the blood-pressure, but subsequently gradually, but considerably, slows the heart, the arterial tension falling somewhat later. 4. In toxic doses (0·6 cubic centimetre and upwards) the drug swiftly stops the heart in diastole. 5. A preceding division of the spinal cord, or of the vagi and sympathetic, or of both of the cord and nerves named, or a preceding subcutaneous injection of sulphate of atropine, does not change the phenomena as stated above; but when made after the subcutaneous injection of grindelia, they diminish the number of cardiac contractions from seven to six a minute. 6. A series of experiments with an isolated heart gave essentially the same results as the experiments with the whole animal. 7. Small doses of the extract cause constriction of the arteries; moderate doses first contract and then dilate the vessels; and large doses dilate the latter from the very beginning. 8. Moderate doses rapidly bring about a decrease of excitabilily of nerves and muscles; the excitability of nerves sinks somewhat sooner, and from comparatively lesser doses than that of muscles. DR. DOBROKLONSKY at present studies the action of grindelia on warm-blooded animals; he mentions, however, in his present note that the results obtained up to the date have been, in their essential features, identical with those for cold-blooded animals..—*London Medical Record.*

TREATMENT OF STRANGULATED HERNIA BY IRRIGATION OF ETHER.—The Canadian Practitioner, Feb., 1876, refers to this method advocated by BARTOSZ, FINKELNSTEIN, KRAVOSKY, and FILATOFF. FINKELNSTEIN'S method consists in pouring on the tumor, every half hour, a large tablespoonful of ether, and allowing it to gradually evaporate. The hernia disappeared spontaneously, or in the worst cases by means of a slight pressure, in the course of four or five hours at the most. The duration of strangulation varied in different cases from a few hours to some days. The author relates also a case of intestinal occlusion in a woman aged 60, with absolute constipation for nine days, incessant fecaloid vomiting, tympanitis, filiform pulse, etc., in which, after ineffectual trials of every known method, the irrigation of ether all over the abdomen caused at the expiration of an hour and a half, very copious stools, and the cure of the patient. The method of irrigation extolled by BARTOSZ can readily be replaced by pulverization or by the evaporation by means of a bellows of the ether poured drop by drop on the tumor. In fine, whatever be the method adopted, the ether acts in the same way as an icebag, by the refrigeration

that its evaporation produces. It is readily applied, and is to be cautiously advised in cases of strangulation that have lasted for several days, as in some of those in which the author has ventured to use it. To do so, is to return to the abdomen a loop of intestine, inflamed, altered, gangrenous, already perforated or on the point of rupturing. To one who has witnessed the perplexity of a careful surgeon, when it is a question of returning to the abdomen a loop of intestine whose integrity after a careful examination is still a matter of doubt, the method of taxis by refrigeration, after several days' strangulation, even when spontaneously successful, seems to be a very great risk which no practitioner would dare to run. In these cases, to reduce after careful examination, is a bold procedure; but to return blindly without examination is inexcusable.

HYDRASTIS CANADENSIS IN THE TREATMENT OF UTERINE HÆMORRHAGE.—M. A. MENDES DE LEON, of Amsterdam (Arch. f. Gynäk., xxvi, 1; Ctrlbl. f. Gynäk., Jan. 23, 1886), reports his experience in the treatment of about forty women with hydrastis canadensis. The remedy seems to have afforded the best results in cases of menorrhagia accompanied with severe dysmenorrhœa as a consequence of determination of blood to the generative organs; in catarrhal inflammation of the body and neck of the uterus; in chronic pelvic cellulitis with severe abdominal pains at the periods; in prolonged and painful menstruation connected with displacements, especially retroflexion and retroversion; and in hæmorrhage at the menopause. Instances are given of each of these five sorts of cases. In almost all of them the drug diminished the bleeding, and generally it overcame unnatural frequency of menstruation. The author observed no untoward effect beyond slight digestive derangements, except in two cases; on the other hand, the appetite was improved. In the two exceptional cases, nervous symptoms made their appearance – the pulse became very weak and frequent, the patients were depressed and had hallucinations, and one of them suffered with transitory delirium and loss of consciousness. The drug was usually given for fourteen days before a menstrual period, in doses of from fifteen to twenty drops [preparation not specified] four times a day; in a few cases it was given during the whole intermenstrual period. Like SCHATZ, the author attributes the efficacy of hydrastis not so much to any action of the muscular tissue of the uterus as to its exciting vascular contraction and consequent diminution of pelvic congestion.—*N. Y. Med. Jour.*, Feb., 1886.

TREATMENT OF CHOLERA BY ABDOMINAL COMPRESSION.—DR. C. BRUCKNER writes in Memorabilien, vol. xxx, No 8, to direct attention anew to a therapeutical measure employed by him successfully in the cholera epidemic of 1872. The excessive loss of fluids from the intestines and stomach causes an inspissation of the blood, in consequence of which the circulation is markedly impeded. The nutrition of the tissues, and especially of the intestinal nerves, already partially paralyzed by the contagium, is thus so seriously interfered with as to constitute in itself a special menace to life. The author was thus led to discontinue all medication, the blood stasis rendering absorption in most cases impossible, and sought to compress the abdomen by means of a cold sandbag, weighing from nine to fifteen pounds, such as is sometimes used in uterine hemorrhage after parturition or abortion. By means of this combination of pressure and cold (ice was also given internally), he states that not only were the intestinal discharges controlled, but the circulation was improved. When the pulse showed that circulation was again active, the remedies deemed appropriate could be administered with every hope that they would act promptly. DR. BRUCKNER employed this method in twenty-five cases of cholera at different stages, and lost but three patients. His papers were published in the Deutsche Klinik for 1873 and 1874. He advises as a more effective mode of producing compression, the application of an elastic band around the body; between this band and the abdomen are placed two metal plates which can be separated by means of a screw. In this way any desired amount of compression can be obtained, and at the same time the application of cold is facilitated by placing the ice-bag between the two plates. PROF. KASHIMURA, of Japan (Wiener Medizinische Presse, No. 42, 1885), employs a somewhat similar principle, placing large ice-bags on the abdomen. But the degree of compression obtained is much less by this method than by that just detailed.—*Med. Record.*

THE TREATMENT OF FEVER BY ELECTRICITY.—PROF. E. DE RENZI, having by chance observed a case of quartan fever cured by the application of electricity, instituted a series of experiments in this direction, and has formulated as a result of these observations, the following conclusions:

1. Fevers of malarial origin resist the action of the electrical current much more than do those symptomatic of bronchitis, pulmonary phthisis, etc.
2. During the application of electricity the temperature remains elevated, or even rises to a fraction of a degree; but soon after, at the most within an hour or two, a fall of several degrees occurs.
3. The best effect is obtained by holding a moist electrode in the hand while a metallic brush attached to the other pole is swept over the surface of the body.
4. Arterial pressure is increased during the application, the skin becomes reddened and often moistened with perspiration, and the pulse is increased in force. It is probable, therefore, that the antipyretic effect of electricity is due to the increased activity of the cutaneous capillary circulation, whereby caloric is more rapidly lost.—*Gazetta Medica Italiana.*

CALIUM APARINE IN PSORIASIS.—DR. T. R. ORWIN writes in the Brit. Med. Jour. of a woman who had psoriasis of the left hand for upwards of twelve months. She derived no benefit from chrysophanic acid ointment, tar ointment, or arsenic, and was unable to do any housework on account of the painful fissures

and general soreness of the affected part. A friend advised a trial of galium aparine to be applied locally as a poultice, and also to be drank as an infusion. In less than three weeks the psoriasis disappeared, and the skin resumed its normal state.—*Med. and Surg. Reporter*, April 10, 1886.

Migraine Treated by Massage.—Mezger and Vretlind (Swiss physicians) find in the great majority of cases of migraine and facial neuralgia indurated masses, resulting from inflammatory processes in the muscular tissue of the scalp and the mucles and tendons of the neck and face.

The myosites, almost without exception, resolve under massage properly applied, with relief of the migraine and neuralgia. These facts the observers hold to be conclusive proof that the infiltrations are not accidental accompaniments or sequelæ, but the actual cause of the neuroses.

The neuroses manifest themselves in the larger nerve stems in consequence of the direct contact of these with the diseased spots, or in the smaller twigs by reflex influence. In searching for these indurated masses, the physician should grasp the muscles with the fingers and raise them from the hard tissues which lie beneath them.—*Wien. Med. Wochenschrift.*

The Treatment of Acute Prostatitis by Hot Water Injections.—M. Paul Reclus speaks very highly of the value of hot rectal injections for the relief of the pain and turgescence of the prostate in acute inflammation of this gland. He uses water at a temperature of 130° F., and instructs the patient to retain the injection as long as possible. At the same time he applies wet compresses of the same temperature to the perineum. By this means he states the pain is almost immediately relieved, vesical tenesmus and dysuria disappear, the swelling diminishes, and a complete cure is obtained within a few days. He relates two cases, one the result of gonorrhœa, in a man thirty-one years of age, and the other in a man fifty-five years, in whom an acute prostatitis supervened upon a chronic enlargement of the gland. In both cases the relief obtained by the use of hot injections and perineal compresses was almost instantaneous.—*Lyon Médical.*

Meniere's Disease Treated by the Compressed Air-bath.—Mr. J. Fletcher Little read notes of this case before a recent meeting of an English Medical Society. The patient, a professional man, suffered from syphilis before marriage. Since his marriage he had had several children, all of whom were free from specific taint. Meniere's disease was diagnosed by a London aural surgeon in the spring of 1885, and anti-syphilitic remedies were ordered. Last autumn, deafness had much increased. The general health was very indifferent, and the spirits greatly depressed. The compressed air-bath, at one and a half atmospheres, was tried, with immediate improvement. After two baths, the hearing had greatly improved, and the general health was better. An interval of six weeks had occurred without any return of the symptoms of Meniere's disease. The patient was now taking iodide of sodium.—*Med. and Surg. Reporter.*

Grindelia Robusta in Chronic Bronchial Catarrh.—In the Russkaia Meditz., No. 1, 1886, p. 11, Dr. L. Grinevitzky highly praises the services obtained from the administration of fluid extract of grindelia robusta, in daily doses of two or three drachms, in inveterate chronic bronchial catarrh. Asthmatic attacks are as rapidly as strikingly relieved. Distressing cough soon disappears, nearly altogether, and expectoration becomes easy. The drug, however, entirely fails to relieve any respiratory disturbances accompanying other pulmonary diseases, as well as those by cardiac and nervous diseases. [Drs. Rochester and W. Murrell also think highly of grindelia as a remedy for asthma. See the London Medical Record, October, 1881, p. 409. Rep.]—*Idem.*

Treating Dysentery with Cocaine.—We have received many letters inquiring about Dr. Winter's method of treating dysentery with cocaine. His treatment of a young child was as follows: Ten drops of an eight-per-cent. solution, in one drachm of water, were injected into the rectum, which relieved the tenesmus for two hours; then twenty drops of the same solution, in a drachm of water, were injected. This was repeated every five, six, or eight hours, according to indications.—*Med. Record*, Feb. 20, 1886.

Antipyrine in Phthisis at Davos.—Dr. Hoedmaker, a Dutch physician, practicing at Davos Platz, has made a number of observations on the effect of antipyrine on phthisical patients, from which he has come to the conclusion that patients not treated with antipyrine are more comfortable than those who are taking it, though these latter have less fever. He has found salicylic acid most valuable in phthisis, especially when combined with arsenic.—*London Lancet*, Feb. 13, 1886.

Menthol in the Treatment of Urticaria and Pruritus.—Among the myriad of remedies for these troublesome effections we have used this remedy for urticaria in three cases. Not only is the itching relieved for the the time, but a cure seems to be effected. In pruritus ani, and in eczema, moistening the parts with menthol solution causes an immediate cessation of the pain. The solution should contain from two to ten grains of menthol to the ounce of water.—*Exchange.*

Powdered Rice as a Styptic.—According to the Indiana Medical Gazette, powdered rice is stated to have marked hæmostatic properties. Mixed with lint, in proportion of from four to eleven per cent., the lint thus treated being used as a compress, it is more effectual than oxide of zinc, subnitrate of bismuth, salicylic acid, or carbolic acid.

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Original Articles.

CLINICAL LECTURE.*

BY PROFESSOR THEOPHILUS PARVIN, M. D., PHILADELPHIA.

SURGICAL OPERATIONS DURING PREGNANCY.

I bring this patient before you, gentlemen, in order that I may discuss for a few moments, a subject of very great practical importance, a question that will confront you frequently, one that you do not very often hear lectured about, yet a subject with which you should be well acquainted. This woman, as you can readily infer from her appearance, is not thoroughly sound mentally; you can see that her mental development is very far from perfect, and owing to this fact we find considerable difficulty in eliciting a very clear history. All we know positively is that she is weak-minded, that she is pregnant, and that she has a broken arm. The humerus was broken a year ago and for some reason it has failed to unite, and we have here truly a false joint. She was for some time in the Episcopal Hospital, but we have failed to procure any accurate reason why non-union has resulted. The fracture is located at the lower end of the humerus, its direction is oblique and the fragments overlap; there is no approximation whatever. Why the arm was not operated upon at the Episcopal Hospital, I do not know. When she first came into this hospital I was somewhat inclined to think that the pregnancy was responsible for the non-union, for while I would not absolutely say that pregnancy is a barrier to the union of fractures, yet it does sometimes occur that when a fracture happens during pregnancy the process of repair is very slow; therefore I was inclined to think that the pregnancy had something to do with it. But, though, as I have said, it is hard to get a clear history, yet we can elicit the fact that the fracture occurred some months before the period of conception; therefore we cannot connect the two.

This reminds me of the story of the Virginian hunter. You know that these hunters are great fishermen and, like fishermen all the world over, are fond of telling *great tales*. On one occasion, one of these hunters shot a fine deer and he invited his neighbors to a venison dinner. During the repast, stories of the chase were in order, and the hunter startled his hearers with the statement that when he shot the deer the bullet passed completely through the deer's head and then went through his foot. This was too much for his hearers and they plainly evinced their incredulity. The host, seeing this, brought in his colored man, who was with him in the hunt, to testify to the truth of his statement. The old darkey was at first non-plussed, he scratched his woolly pate for a while and then, as an idea seemed to strike him, he said: "Yes, dat's so, ebery word massa hab said am gospel truf; when we saw dat deer, he was scratching his head and de bullet just passed right froo his head and his foot bof." But later, when the guests had gone, the darkey said: "Massa, I lub you and I want to swear dat all you say am so, but next time please don't put them so far apart." So I say about the fracture and the pregnancy in this case, the dates of occurrence of the two phenomena are too far apart to allow us to conceive of any connection between them. I doubt very much whether even the ingenuity of this Virginia darkey could make out any connection between the two. Well, now the question that I started out to discuss comes up for solution. My resident tells me that this woman is in the seventh month of pregnancy and she has an ununited fracture that invites an operation for its cure, and the chances are that such an operation would be successful. Well, now, should we operate? I would say no, not during the pregnancy. As a rule, I would advise you to defer all surgical operations that can be postponed until after pregnancy, and especially would I emphasize this rule with reference to all operations about the genital zone, and by this expression I do not mean merely the parts about the uterus and vagina, but I include also the mammary region. An operation for hemorrhoids during pregnancy would be very likely to cause abortion. The relation between the rectum and the genital organs is very close and intimate. So, I would say that all operations of complaisance, operations that are not essential to the saving of life, should be postponed until after the labor. But let us suppose that instead of this simple fracture there was a sarcoma or a cancer of the arm; well then, under such urgent circumstances, I would not hesitate to operate during pregnancy. So, also, would I operate on cancer of the breast

* Delivered in the Philadelphia Hospital, March 10th.

or a cancer of the cervix itself, if it were progressing. It will sometimes happen that there will be some disease of the sexual organs, and in this term I include the breasts, which is making rapid progress during pregnancy and where you can see that the only hope of saving life, or at least of prolonging existence, is to be found in operative measures, and, in such cases, I would not hesitate to operate. I would not hesitate when there was a cancer of the cervix, if the progress was rapid, for even if it did produce an abortion this would be the lesser of the two evils and it would be very likely to occur anyhow before the termination of pregnancy, with the uterus in this condition. Even though the pregnancy did go on to full term it is more than likely that the child could not be born naturally with this condition of affairs. Before this woman leaves the room I want to call your attention to the condition of Montgomery's glands which are typical of what you see in pregnancy, and also to this secondary areola, which well illustrates the ordinary expression we have when we say that it looks like a piece of blotting paper on which dust has fallen and on which water has then been sprinkled. This appearance is very well seen here. I said some time ago that my resident told me that this woman was in the seventh month of pregnancy, but this secondary areola is so well marked that I am inclined to think that she is probably in the ninth month. Let me here utter a word of caution in reference to the diagnosis of pregnancy; while the signs which offer to the eye in pregnancy are very characteristic, yet I warn you not to rely solely or too much upon the eye. I would say that when you both see and hear, then you can, without hesitancy, believe, but I would not implicitly trust to sight alone. Therefore, though you may have all the visible signs of pregnancy, I would be loth to positively pronounce a woman pregnant, unless, by auscultation, I had detected the fœtal heart sounds and the uterine souffle. Remember this caution, for it will save you from many an embarrassment. Now, to summarize, I would enunciate the general rule, that whenever the question of surgical operation presents itself in connection with a pregnant woman, if it be possible, without jeopardizing the safety of the patient, I would postpone it till after labor, but if the case be of such a nature as to threaten life, or if delay would prejudice the ultimate chances of a woman for recovery, then I would not hesitate to operate.

Before proceeding to the next case, I want to say a word of advice to the class. The attendance to-day is very light. I notice that when I have any very bloody operation to perform the benches are very full. Now, gentlemen, I am sorry to note this fact. Where the carcass lies, there the vultures most do congregate; and where the blood flows there the medical students assemble. This is a pity, for I can assure you that it will be of more service to you in after life to know how to cure a case of hysteria, or of bilious headache or of bilious diarrhœa, than it will be to know how to operate for stone or to perform any other capital and rare operation.

There is food for reflection in the case that I have just shown you, from a moral stand-point. It well illustrates to us the power, the evil force of the lust of man. Here is a poor, miserable specimen of femininity, fully forty years of age, repulsive in appearance, semi-idiotic and with a broken arm, yet the lust of some man has been so great that we find this poor creature pregnant with child. Lust is a terrible thing, and when we read of some of the horrible crimes that are committed under its influence, we are forcibly impressed with the teachings of St. Paul, that it was his constant effort to keep his body under control, to keep his passions in submission. His advice is of the greatest importance for all, but especially for young men, whose blood is madly coursing through their veins and who, subjected to innumerable temptations, will be carried away by the demon of lust if they are not very watchful.

VARICOSE VEINS IN PREGNANCY.

You will, no doubt, suppose, gentlemen, that I am presenting to you a very trifling affair, when I talk about varicose veins, and you will feel that you know all about them, but I am sure that I can give you some points that you have not hitherto thought of and that will prove of service to you in your future practice, for let me strongly assure you that varicose veins in pregnancy are not to be lightly considered, and if neglected may cause serious annoyance, if not fatal results. Therefore, you will be prepared to understand how important it is that you should know all about them. To go to our patient, I suppose you can see these distended and tortuous veins, for the condition is rather general. We may have this condition of the internal saphena vein and its branches sometimes of the external saphena, of the popliteal, of the femoral, or, as sometimes occurs, the varicose condition may be confined to the deep veins and not show externally. This is the first pregnancy for this woman, and from this fact we learn that varicose veins do occur in primiparæ, though, as a rule, they are not so pronounced as in multiparæ; still they are quite distinct. Sometimes these veins will become enormously distended, so much so that the limb will lose all its shape; it becomes veritably an enlarged *legacy*, a false one, it is true, but of much more frequent occurrence than are true legacies. In the course of the varicose veins you will not in-

frequently encounter veritable aneurismal dilatations. There is a very interesting fact in connection with these dilatations upon which I wish to dwell for a few minutes. Let us turn our attention to the valves. When the discoverer of the circulation was making his great discovery he was led to question himself as to the utility of the valves, and working along in this line it was really the doctrine of final causes that led to this great discovery. The later scientists do not seem to care to recognize such a doctrine: they would say that a duck swims because he has a web-foot, but they would deny that he had a web-foot in order that he might swim. I am inclined to think that, to use a homely phrase, many of our modern scientists very often get "the cart before the horse." LORD BACON has taught us that many of the physical problems of the world have been unravelled by the aid of philosophy, and it is well to occasionally turn aside from physical facts and see whether the teachings of philosophy will not enable us to understand their wherefore. Did it ever occur to you to wonder why, in the latter months of pregnancy, the mother's blood contains twice as much fibrin as it does when the woman is not pregnant? This is a fact, but do you know why? It is a part of nature's plan in order that she may block up the orifices of the vessels when the placenta is detached. You thus see how beautifully nature provides for all contingencies that are going to arise. Again, why is it that the fœtus is covered with an oily, unctuous substance? You know, if you were to keep your hand in a bucket of water for a long time, how shriveled it would become; so, also, would the fœtus, if it were not for this oily coating. So here, again, you see the beneficence of nature. Well, then, these valves have been supplied as resting places, as it were, for the blood. You have seen the hod-carrier, with a load of bricks or of mortar on his shoulder, climbing to the top of a high building, in course of erection, and you have noticed how he rests on the different platforms, to regain new strength for his continued ascent; so these valves afford resting places for the blood, that it may recuperate, so to speak, on its journey to the heart. These valves offer a resistance to the downward pressure of the column of blood. When you cut a vein, it is not the blood that is ascending that flows out, but that from above which is passing downwards. Thus when a vein in the leg is wounded it may drain the popliteal, the femoral, the iliac vein, even the descending vena cava, all this may flow out, and the patient may die in consequence. This that I have been telling you is not merely theory, but it is of great practical importance. For, suppose a hæmorrhage is taking place from a vein, it is now obvious to you that you must not try to control it by pressure below the wound, but that you must place a compress above it. I would note the fact that varicose veins are liable to occur with equal frequency in either leg; it used to be supposed that the right lateral obliquity of the uterus would determine a greater tendency to varicosity on the right side, but this idea has been exploded. Now, you will no doubt ask why varicose veins occur in pregnancy, whether there is any special reason for their occurrence at this time? Of course we know that men are very liable to varicose veins, but not any more than women. In men they occur because, by the very nature of their occupation, they are on their feet much of the time, those who climb great heights, or in whom the lower limbs are habitually dependant, or are much used and strained, are very liable to have them. If women did not have babies they would not be so liable to have them, but it is a custom that will not be changed in your lifetime or mine for women to have children, and I imagine that this custom will continue; hence, we will always have varicose veins. You may say that it is due to pressure on the blood-vessels, but I think there are other causes. Why do they occur in the first few months of pregnancy, when there is very little pressure? You probably are aware that one of the very earliest signs of pregnancy is a blue condition of the vagina. Why does this occur? Because there is an engorgement of the part, an excess of blood, that greatly distends the veins, so that there is more venous blood than usual at a given time. There is also an increased congestion of the uterus caused by the demands of the new being therein for nourishment. This afflux of blood causes a superfluity of blood in the uterine and vaginal veins, and we have, in consequence, this blueness, which is very plainly visible in the early months of pregnancy. There is a similar condition of the veins of the lower extremities, and any obstruction to the free flow of blood through the pelvis will make these veins very prominent. As a rule they are not noticed in primiparæ until about the fifth month, while in multiparæ they are evident as early as the second or third month. Well, now, this increased determination of blood to the pelvic viscera, by impeding the circulation through them, accounts, in part, for the varicose veins, but it is also to be noted that there is an absolute increase in the volume of the blood in the body during pregnancy, caused by the extra demands on the nutrition of the woman. This increase is absolute, for if you were to remove the fœtus, the uterus and its appendages, the woman would still weigh more than she did before conception. Owing to this excess of blood there are certain changes in the circulatory system; there is a general increase of arterial tension, the pulse is harder, fuller and firmer, partly because the arteries

contain more blood, and partly because of the hypertrophy of the heart that has been conservatively induced owing to the demand that is made upon it for extra labor. It is a fact that in nearly all pregnant women there is more or less hypertrophy of the heart, at least of the left ventricle, just as the arm of the blacksmith becomes hypertrophied in consequence of the extra labor that it performs. Owing to this high arterial tension, the weaker walls of the veins become distended by the excess of blood that is forced through them. This distension occurs more frequently in the legs than in the arms or the chest, because of the influence of gravity. It has been beautifully said that sleep is the twin-brother of death, and fully one-third of our lives is passed in this condition. If the other two-thirds, if sixteen out of every twenty-four hours are passed in the erect position, you will readily appreciate the importance of gravitation in this causation. Well then, owing to this repletion, there is a slowing of the blood-current and there is also a change in the lining membrane of the veins. You know that if you put a quantity of blood into a smooth vessel, the process of coagulation is delayed, while if the vessel be rough, it is accelerated. This fact is illustrated by the surgeon when he introduces horse-hairs into an aneurism in the hope of thereby securing coagulation of the blood therein. Let us see what happens in the blood-vessels. Nature has provided these veins with a smooth lining, and the blood flows through them as readily as a wheel revolves on a well-greased axle. But let this vein become distended and rough, as it does, there will then be rough points that will catch or entangle the fibrin, and coagulation will result. Those of you from the country have noticed how, when a stream is washing away its banks, the farmer will chop down a large tree and let it fall into the stream. The leaves and limbs, reaching out like giants' hands, will entangle in their meshes the solid matter, and will restore to its integrity the bank. Just so it is in the dilated and roughened veins. The finger-like projections arrest the fibrin and it coagulates. Like OLIVER WENDELL HOLMES' famous "One Horse Shay," the blood must be always moving. You know that this poetical shay went all to pieces, of a sudden, when it stopped moving; so, if the blood is but momentarily arrested in its circulation, it will go all to pieces. This is the secret of the coagula that occur in varicose veins. Now, let me tell you that when a woman has bad varicose veins, she is in constant peril, not very great, as a rule, but still in peril. The most common cause of danger is a rupture of the vein, which may be caused by a blow. I once knew a woman who accidentally struck her leg against a table, with the result that she bled to death. It may happen that a strain, such as reaching up to put something on the mantle-piece, will be the cause of rupture. In some cases a purposive blow may be given. Sometimes, as a result of inflammatory action, the varicosities become attached to the skin and an eczema occurs, which, causing an irresistible desire to scatch, may by this very scratching cause a rupture of the vein. When they itch, a man as well as a hog, will scratch, notwithstanding all advice to the contrary. You probably remember SIDNEY SMITH'S devils, who were so sympathetic with the itching hogs, that they arranged sticks for them to scratch against, at different levels, so that all sizes of hogs might be accommodated. This eczema will be caused partly by the increased sweating of the part, due to the excess of blood therein and partly by the bandaging that is generally resorted to. So, between the sweating and the heat eczema will frequently occur. I have said that death may follow the rupture of a vein; but there is also another cause of death that may be brought about by varicose veins. I refer to embolism; a thrombus may form in the femoral vein or its tributaries, and, becoming detached, may be washed along in the current of blood until an embolus forms in the lungs and instantaneous death may be the result. Remember then that varicose veins are always to be considered as a possibility of great peril. Well, now, you might ask me why it is that varicose veins do not occur in all pregnant women, for it is a fact that they do not. When we are hard pushed for an explanation, we are very apt to fall back on the convenient word, "idiosyncrasy," or to say that it is due to some peculiar diathesis. Several men will be exposed to the same deleterious influence, and while one will get rheumatism, another will have some other disease, and we explain this inexplicable selection by the law of diathesis. Well, now, I do not know of any better way to explain the question under consideration, than to say that it is due to a varicose diathesis, which very probably consists in an intrinsic weakness of the walls of the veins. Sometimes there will be rupture of small veins and the formation of thrombi beneath the skin, when there will be patches as black as your hat, which will much alarm the patient, as she will think that true mortification is commencing.

It is a fact that compression of these veins will sometimes produce abortion. The story is told of a cook who was very fond of sexual pleasures and who always knew that she was pregnant by the occurrence of varicose veins; this was the first and always the infallible sign. She would then bandage the limbs very tightly, the uterus would become congested and she would invariably abort. With some women the very earliest sign of pregnancy is a discoloration of the limbs, due to this effusion, a discoloration that is not removable by soap

and water. Sometimes these veins are enormously distended and serpentine, when they have been likened to medusa's head. Well now, all ways lead to Rome and in time, when the pregnancy is completed, these veins resume their natural size. What shall we do for them? Some advise to resort to curative measures, and success is reported from hypodermic injections of ergot, or of a few drops of alcohol and water, below the vessels. This proceeding will cause an inflammation and obstruction of the vessels, but it may cause ulceration or erysipelas. As the condition disappears after labor, I would advise that you resort only to palliative measures, using a laced stocking or bandages or thin sheets of led cut to fit the limb and fastened in position with bandages. Then, of paramount importance is the constant maintenance of the horizontal position. You remember how DICKENS, in his "American Notes," ridicules Americans for sitting with their feet above their head, on window-sills and mantle-pieces; well, while not the most graceful, yet the most beneficial position for women with varicose veins would be just such as this. The elastic stocking is a cheap and convenient way of procuring compression, but it will be very apt to cause irritation and eczema, and I have told you how dangerous this condition may become, hence, on the whole, I think it would be wiser to resort to a flannel bandage. At the same time the woman should be strictly enjoined to lay aside her garters, her corsets and all articles that may be compressing the abdomen in any way. The flannel bandage should be worn all day and removed at bed-time. It will be well to place small compresses of soft linen over the veins below the bandage and the latter should extend from the toes up to above the varicose veins.

Well now, what if a vein ruptures? You must hurry greatly if you hope to save life; the case will demand immediate attention and the delay of a moment may mean the rushing into eternity of your patient. When a pregnant woman has varicose veins you should always warn her beforehand what to do in case of a rupture. It is a curious fact that sometimes after the hemorrhage has stopped, the vein will so contract that you cannot discover the the orifice through which the blood has escaped. Hence I caution you not to declare that a hemorrhage has been impossible because you cannot discover the orifice. If there is any eczema you must caution the patient about the danger of scratching. Tell her that the moment there is any bleeding she must at once assume the horizontal position and make firm pressure directly on the bleeding point. I do not wish to use any word that has a double meaning, but I would say, because it is expressive, that you must *dam* the blood at once. These homely expressions sometimes serve to carry a truth home and fix it there, when more elegant words fail of their purpose. Well now, when you arrive how will you control the hemorrhage. You must, of course continue the pressure, but the radical method will be to pass a needle under the bleeding point and envelop it with a figure of 8. Remember, in conclusion, that a woman with varicose veins is always in peril, and you must warn her and advise her what to do, else you may have the mortification of seeing her slip off into eternity, with the velocity of a thunderbolt.

CLINICAL LECTURE.*

BY PROFESSOR H. C. WOOD, OF PHILADELPHIA.

ULCER OF THE STOMACH—PERFORATION AND SUDDEN DEATH.

Although not belonging to the class of nervous diseases, I will commence my lecture, today, gentlemen, by showing you all that remains above ground of an exceedingly interesting and instructive case. It will be well for you to note this case carefully and store it away in your minds, for I have rarely encountered a case wherein the diagnosis was so obscure, and as you may be likely at any time to be summoned to a similar case the remembrance of this case will bring to you a ray of consolation in your hour of doubt.

Last Thursday morning about half past eleven o'clock, I was hastily summmned to a case for the purpose of giving relief from great suffering, as the family physician could not be found. I found a young lady of large frame, who had previously enjoyed perfect health, suffering the most intense pain. The evening before she had been, to all intents and purposes, perfectly well; that same morning she had eaten her breakfast, after which she went up stairs and in a short time was heard screaming for help. I found her writhing in pain, which, while it extended over the whole abdomen, seemed to have its centre of origin or of intensity in the left iliac fossa. There was no swelling of the abdomen, there was a general tenderness on pressure, but no point of special localized tenderness. There was nothing special about the pulse, which was quick and small. I must say that the case puzzled me, there was plainly evident the most intense suffering, yet there was no symptom of peritonitis, beyond this, and nothing else to call my attention to any special condition. I therefore decided that I could not then make a diagnosis, so I gave her a hypodermic injection of morphine and left, saying that I would return in an hour. When I returned, I found her much in the

* Delivered at the Hospital of the University of Pennsylvania, Feb. 5, 1886.

same condition as when I left, her suffering was still intense and she expressed the wish to die if she could not be relieved. The tenderness was somewhat less, there was no tympanitis, but a very curious change had occurred, the pain had shifted from the abdomen and was now located in the left shoulder; it was greatly aggravated by motion, but did not extend down the arm, being limited to the shoulder. There was still some abdominal pain, but the most marked suffering was from the shoulder. I now examined the heart and found a mitral regurgitant murmur. I also observed, what was not present on my first visit, that peculiar aspect of the face, which is so commonly seen in conditions of grave disease; it was pinched and haggard, and had that peculiar expression which you will never forget when you have once seen it. It is the form of face that used to be so well described by the late Dr. John Meigs; it is somewhat after the Hippocratic face. Now I realized that the case was serious, but what was its nature, I could not yet fathom. Taking into consideration the facts that the pain had shifted, that it was increased by motion, and that we had an endocardial murmur, I was somewhat inclined to regard it as a case of furious acute rheumatism, which had selected the peritoneal region as the site of its first manifestations, migrating from there to the shoulder and the heart. But such a view seemed untenable; for if the disease were so severe as to have so early implicated the heart, the pulse would necessarily have been irregular, which it was not; it would have been intermittent and failing, but I have already told you that all I noted about the pulse was that it was quick and small. There was heard about the heart a somewat peculiar sound, as though its action were labored. Now I gave her a wet pack and went away. Returning in an hour, I was informed by the servant, at the door, that the family physician had been found and was in attendance, so I retired, to hear no more of the case, until the next morning, when I was summoned to the house only to find the patient dead upon my arrival. I was told that she had always been active and strong, was accustomed to take long walks from which she would experience even less than the to-be-expected fatigue, and that only the day before her fatal illness she had remarked to a friend that she did not remember having ever had a pain or an ache in her life. The attending physician writes me that when he saw her the pupils were contracted (which was no doubt due to the injections of morphine I had given her); he then goes on to say that the abdomen was somewhat sensitive, more particularly where mustard had been applied, and he felt a hard, insensitive mass up near the umbilicus, which he supposed to be an accumulation of fæcal matter, but which the autopsy proved to be entirely different. He also noted the pain in the shoulder, which was so severe as to inhibit the action of the heart. In rising from the pillow or moving about in bed there was muscular spasm and pain, which suggested to the family physician that she was suffering from rheumatism or lumbago. He left her with this impression and did not see her alive again. The family complete the history by saying that she suffered severely all Thursday afternoon, while the suffering somewhat abated towards night. In the early morning of Friday she was comparatively free from pain, but extremely prostrated. Her family gave her a cup of hot coffee to warm her, she drank it and a moment later she was dead. The attending physician thinks that the immediate cause of death was inhibition of the heart, but I rather incline to the view that it was due to exhaustion. At one time the thought entered my mind that there might have been a rupture of a Graafian vesicle, with an effusion of blood into the peritoneal cavity and a consequent peritonitis. She vomited once, I forgot to say, during her sickness, immediately after she had taken some food, but this was the only time she vomited.

At the autopsy we found the supposed fæcal accumulation to be a fibroid tumor in the upper part of, or really sitting on, the uterus, but this, of course, had nothing to do with the fatal issue. When the stomach was opened we found an ulcer on its anterior surface, which had penetrated its coats and allowed the contents of the stomach to escape into the peritoneal cavity. It looked like an old ulcer and it is a curious fact that there was another ulcer on the posterior surface of the stomach, directly opposite to that in the anterior wall; this last ulcer was quite superficial. Passing up to the chest we found commencing atheroma of the aorta, and the murmur heard during life was accounted for by a thickened and atheromatous condition of the mitral valve. The columnæ carneæ were increased in size and there was some hypertrophy of the heart. I neglected to tell you that there was considerable epistaxis, and I wish to draw attention to this fact in an especial manner, because it is a very significant symptom of heart disease. Whenever a patient comes to you complaining of repeated and, apparently, causeless bleeding from the nose, make it a rule always to examine the heart, for this may be the only evident symptom of unsuspected heart disease. In this case the condition of the heart was never suspected, neither was the fibroid tumor, for, as I have told you, she was supposed to be in perfect health. Looking back at the question of diagnosis in this case, with the aid of the light that the post mortem has thrown upon it, I do not see how it would have been possible to have made an accurate diagnosis. If you had read a

report of this case, you might have made a diagnosis, based thereon, but, with such obscure symptoms it would be highly problematical. The pain in the left shoulder is not an infrequent symptom of gastric ulcer with perforation, just as pain between the shoulders is a frequent sign of gastric ulcer. I have now a patient in Blockly Hospital with ulcer of the stomach, in whom the pain is located in the lumbar region. Remember that pain does not always arise in or represent the seat of lesion, but it may be reflex, just as we have reflex spasm or reflex amaurosis.

From this case an important lesson should be drawn in reference to the treatment of gastric ulcer. European statistics tell us that either open ulcers or the cicatrices of those that have healed appear in 5 per cent. of all the autopsies that are made. This statement shows how common these ulcers are. In this country either those who make post-mortems are not so careful about looking for them, or else they are less common, for we do not have them in so large a percentage. Such cases as I have reported to you are not very rare, for the physician to the coroner of this city, Dr. Formad, tells me that in one year he made autopsies on three cases of sudden death where he found gastric ulcer, perforations and effusion of the contents of the stomach into the peritoneal cavity, and in none of these cases was there any previous, ante-mortem, suspicion of the true nature of the trouble. I will not discuss the symptoms of gastric ulcer, which you can learn elsewhere, but I would strongly impress upon you the great importance of treating gastric ulcer. The symptoms of gastric catarrh will be very similar to those of ulcer and the treatment will be very much the same, though less rigid in the former case.

Within ten days I had a lady of fifty-five, who suddenly vomited nearly a pint of bright arterial blood; more followed and she nearly died. I have no doubt that in this case there was a gastric ulcer. In the case we are discussing, the condition of the heart offered an element of complication in diagnosis, for as there was no history of previous ill-health, we could have no means of knowing that the disease of the heart was an old affair and, supposing it to be recent, the theory of rheumatism was not an unreasonable one. I would say that when the diagnosis is clear, when you are sure that you have to do with a perforating ulcer of the stomach, you will be justified in opening the abdomen, cleaning out the cavity with carbolized water, paring the edges of the ulcer, sewing them up and closing the abdomen; of course, in this event, the patient would most likely die, but if left alone, she would surely die, and in my opinion, you would be justified in giving her this chance for life.

POLIO-MYELITIS—UNUSUALLY RAPID DEVELOPMENT.

This man tells us that five years ago he noticed for the first time these muscular twitchings, which, as I have him stripped to the waist, you can plainly observe. I have never seen a case where the muscular twitchings were so furious, they come and go as rapidly as the opinions in the mind of a woman. Three months ago, he tells us, he commenced to lose power in his arms, which was first made apparent by a growing inability to hold his tool, while working at his trade of a roofer. This loss of power steadily and rapidly increased. It is evident that this man has paralysis with twitching and wasting of the muscles. The lower arms have borne the brunt of the disease and we note the greatest degree of wasting in the fingers and in the interosseous muscles, the latter of which are almost entirely gone, so that he has absolutely no lateral power of motion in his fingers. His grip is feeble. Well now, we have here double monoplegia. Now, what is the matter, what is the cause of this trouble? Let us start out with the proposition that the cause of monoplegia may be centric or it may be peripheral; it is always necessary for us to have one lesion or the other. In centric monoplegia, the lesion is in the cortex of the brain and the disease is conveyed to the peripheral nerve apparatus, in the muscles or in the grey matter of the cord. We do not yet know much about those cases originating in the muscles, we are not well acquainted with the phenomena of myositis, we have only heard of these kind of cases within the last two or three years, hence we must consider peripheric cases as originating in the nerves or in the cord. Now, to which class does this case belong? As a rule, when we have rapid wasting, the cause is peripheric, when slow it is centric. Having decided that the cause is peripheric, the next point is to decide whether it is situated in the nerves or in the anterior cornuæ of the cord. This question we must mainly decide from the history. When some pressure, such as sleeping on the arm, a cut of a nerve, a blow or some other traumatism has been the starting point, it is safe to presume that the cause is to be found in the nerves. If there is no history of traumatism, you should make pressure along the course of the nerves, as I am doing here, to see whether, from sensitiveness, you can make out a case of neuritis. It is not sensitive here, hence I infer that there is no neuritis, though this is not an absolutely positive conclusion, for I believe that there are cases, where we have neuritis, affecting only the motor nerves, when of course the sensitiveness would not be present. At least two-thirds of such cases of monoplegia are due to some disease about the roots of the spinal nerves, so we will examine

the base of the neck; there is no prominence, no tender points on pressure and when I strike the top of the head, the jar elicits no pain. Now then, to recapitulate, from the rapidity of the muscular wasting, we have concluded that the cause is peripheric, and since we can find no traumatism or neuritis we must needs conclude that it is caused by a diseased condition of the anterior cornuæ of the spinal cord, a wasting of the cells. Having now ascertained the nature of the disease and its cause, let us go further and endeavor to ascertain the cause of the disease of the cord, for upon this will depend our prognosis. There are two sets of causes, the treatment of which will differ widely. There are certain cases of chronic polio-myelitis, with muscular atrophy, the true disease, we might say, where we can do nothing worth speaking about; the prognosis must be necessarily gloomy, for there is irremediable disease of the cord at the bottom of the trouble. Then again, we frequently have cases, like the one before us, presenting all the symptoms of polio-myelitis, which are due to the presence of some poison, always metallic, in the system, which causes destruction of the cells of the cord. I recently had before the class, a case where arsenic was the cause, and I have seen a number of cases that were due to lead. Now, this man is a tin-roofer by trade, and the solder used on tin roofs is a mixture of tin and lead. From this fact I derive a ray of comfort in my prognosis. I look at his gums, but do not find the usual blue line; this, however, is not conclusive, its presence is diagnostic, but its absence is not. We will examine the urine, and if he be suffering from lead-poisoning, we will find the salts of lead therein. If we find lead, we will treat him for that condition; if not, we will direct our remedies chiefly towards the condition of the cord, and in this latter event, the most we can hope to do is to arrest the further downward progress of the disease. I learn that his legs are also affected, which will still further increase the probability that the trouble is due to lead, while the rapidity of the disease favors the idea of lead, for in three months' time these muscles have wasted as much as they would in pure polio-myelitis in three years

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT]

Stated meeting, April 19, 1886.

The president, E. J. DOERING, M. D., in the chair.

DR. G. C. PAOLI read a paper entitled

THE REASONS WHY FEMALE PHYSICIANS ARE DESIRABLE IN INSANE ASYLUMS.

He demonstrated that the most eminent specialists in psychiatry in the United States are a unit in maintaining that female physicians are best qualified for treating the female insane. Many States have passed laws requiring one female physician to be alloted to each one hundred female insane in their asylums.

DR. J. G. KIERNAN said eminent authorities had already pointed out the relation which exists between uterine disease and insanity. Popular opinion is growing in favor of the employment of female physicians in the treatment of the female insane.

DR. WM. T. BELFIELD reported nine cases of

IMPERMEABLE STRICTURE TREATED BY ELECTROLYSIS.

During the past two years he has treated thirty-seven cases of stricture by electrolysis; and except for strictures located witin an inch of the meatus, and for strictures of large calibre elsewhere, considers it preferable to dilatation and urethrotomy for the following reasons:

1. It will pass through any stricture, however tight, rigid, long, or tortuous.
2. As a rule it causes no pain, bleeding, chill, nor urethral fever.
3. It is always devoid of danger.
4. Its effects are lasting.

In certain numerous cases electrolysis is not merely a preferable, but really the only practicable treatment. Such are, 1, old, rigid, cartilaginous strictures in men of middle or advanced age, where urethrotomy is dangerous and dilatation ineffectual; 2, impermeable strictures; 3, tight and rigid strictures with perineal or scrotal fistulæ.

DR. BELFIELD then narrated the successful treatment by electrolysis of nine such cases. In three of these cases there was complete retention of urine, the bladder being distended above the umbilicus; these strictures were absolutely impermeable, to urine from within as well as to instruments from without. In each case a No. 10 electrode (French) was passed into the bladder in less than twenty minutes, permitting the immediate introduction of a catheter. In each of these cases perineal section would have been, without the battery, inevitable.

In the remaining six cases DR. BELFIELD, as well as other surgeons, had failed in attempts to pass bougies into the bladder; yet, as the patients were still enabled to force a feeble, dribbling stream outward, these strictures were theoretically impermeable. In these also a small electrode readily entered the bladder in one or two sittings.

In one case, seen in consultation with DR. MILLER, the patient had a series of tight, rigid, impermeable strictures, and twenty-seven fistulous openings in the scrotum and perineum; he had submitted to both internal and external

urethrotomy, and to numerous unsuccessful attempts at dilatation; was urinating every half hour, day and night. In fifteen minutes a No. 10 bulb entered the bladder; that night patient rose only once to urinate, and for the first time in several years the urine flowed entirely from the meatus and not from the fistulæ.

The unfavorable results obtained by various physicians in their attempts at electrolysis have been caused by the use of improper currents, whereby heat was generated and the urethra cauterized, causing violent inflammation and even extensive sloughing. When properly used, the heat produced is insignificant; with six to fifteen small cells and a weak fluid, the cicatricial tissue constituting the stricture is dissolved away but not cauterized. Since cicatricial tissue is but scantily supplied with blood, and is therefore poorly nourished, it yields to a dissolving current which is insufficient to disturb the healthy urethral tissues.

Dr. L. L. McArthur said he had treated with success by electrolysis one case in which numerous operations had already been performed. When patient came to him he could pass a No. 8 sound; used No. 9 electrode, and the patient can now pass No. 15 American sound. Never had any pain or difficulty in micturating since the operation.

Dr. M. B. Brown detailed two cases of impermeable and two of permeable stricture, in which he used electrolysis with good result.

Dr. C. Fenger said he must confess he was somewhat surprised by seeing the announcement of Dr. Belfield's paper "nine impermeable strictures treated by electrolysis." He had tried electrolysis a few years ago, but never had any success from it. It surprised him that Dr. Belfield should meet with nine impermeable strictures in a very short period of time, while Sir Henry Thompson has only met with three impermeable strictures in his whole life. By hearing the paper read, however, he understood that Dr. Belfield does not mean to say that the strictures were impermeable in the strict sense of the word—the only correct one—but only meant that it was difficult to pass any instrument through these strictures. Sir Henry Thompson, in his "Diseases of the Urinary Organs," of 1882, p. 28, says: "Impermeability can not be held to describe a character, a physical quality of the stricture itself, but rather indicates the quality of the surgeon who has treated it." Impermeable stricture is a contradiction in terms; it is not heard so much now as it was twenty years ago. Dittil, of Vienna, in speaking about relative and absolute impermeable strictures, says a stricture may be impermeable for one man, or at a certain time, and permeable for another man, or at another time. Other modern authors on surgery, as König and Albert, speak about the matter in a similar way.

The second surprise to him was the advocated treatment by electricity, or electrolysis. There has always been in his mind a suspicious halo of mysticism about the electrolysis, whether applied to the different forms of surgical tumors or to strictures of the urethra. He understands from the paper, that the electrolysis does not mean galvano-caustic treatment, although quite recently Jardin, of Paris, uses a small galvano-cautery knife for passing slowly through the stricture. Dr. Belfield warns very justly against cauterization. The non-caustic electrolysis is to him a very mystic process. Dr. Fenger remembers years ago of one of Bilroth's clinics in which he spoke about electrolytic treatment of venous angiomas of the face, that he expressed as the result of his experience the following: "The electrolytic needle has no more or other effect on the tumor in question, than the mere mechanical disturbance of the tissue-elements, that is, than any other needle not connected with a battery, would produce."

Frankly, Dr. Fenger said that the historical fate of electrolysis in strictures, as well as elsewhere, up to date, has invariably been the following: Ever since Tripier, in 1864, and Mallez, in 1872, applied the electrolysis in strictures of the urethra, this method of treatment has come to the surface once every two or three years only to disappear again, and it has never been able to take any hold on the profession; not because it has not been tried, but rather because it has not been found superior, or even equal, to the other methods. Littel states that, on the rather promising representations of Tripier and Mallez, he tried electrolysis in three cases of very narrow stricture. It proved of no effect in any of the cases, and in one of them a local inflammation followed. Sir Henry Thompson does not even mention the electric treatment anywhere in his writings about strictures, but warns very emphatically against any method of cauterization. Kœnig says, in a very short appended notice, that only the short and soft strictures depending upon a polypus or warty growth of granulation tissue are proper objects for cauterization, either chemical (Duchamp), or galvano-caustic (Middeldorf). Otis, our American authority in this line of surgery, does not mention electrolysis with a word.

Newman, of New York (Medical Record, August 12-19, 1882), is not only the advocate of electrolysis in this country, but has written so assiduously and specified the method so minutely as to have it termed, in the foreign literature, "Newman's method." In 1882, Newman's old and new cases numbered twenty-three only. In reporting Newman's articles for Virchow's Jahresbericht, Guterbock, of

Berlin, says that "NEWMAN'S method had already, in 1872 and 1876, been criticised so thoroughly that not much more need be said about it." DIKMANN, in New York Medical Record, Jan. 5, 1884, reports twenty-eight cases. GRAF, in Norway, reports, in 1884, two cases treated by "NEWMAN'S method," and VERNEUIL, in 1884, recommends JARDIN'S "electrolyse lineavu"—that is, cauterization.

Thus the electrolytic treatment of stricture has been tried off and on for over twenty years, but has only taken hold here and there, sporadically, and for a short time. It has in the urethra, not any more than in the other fields of surgery, as yet to any extent replaced the more rational treatment by mechanical means.

The electrolysis may, however, have a further trial, and if the success in extensive resilient strictures, as in one of DR. BELFIELD'S cases, should prove to hold good for other cases of that kind, it is possible that this treatment will have a better fate in the future than it has had in the past.

DR. R. TILLEY said he did not consider electrolysis to be the proper term to be used in connection with the use of electricity in the manner suggested. Electrolysis, in the ordinary acceptation of the term, means the decomposition by electricity of water, or tissues, being in the nature of a chemical decomposition. He would like to know how far apart the electrodes were placed. (DR. BELFIELD replied that the negative electrode was placed in the urethra, and the positive pole in any position on or near the penis, according to the effect intended.) He could not see how electrolysis could be produced with the electrodes so far apart, and a weak fluid, without a cauterizing effect. From his extensive experience of cocaine in producing contraction of the tissues in the nose, he would expect to secure as good if not better results, reasoning by analogy, in its use in strictures of the urethra as in the use of electricity. He would think its internal application would be followed by wonderful results.

DR. T. W. BELFIELD closed the discussion by saying that in reply to DR. FENGER'S criticism that these strictures were not impermeable, he would remind him that he called six of them "theoretically permeable, practically impermeable;" that is, a feeble stream was forced through, but no instrument could be introduced. The remaining three were absolutely impermeable to urine as well as instruments. They were water-tight, the bladder in each case being immensely distended. DR. FENGER, in the cases where he attempted electrolysis, evidently made the usual mistake: he employed a strong current and *cauterized*, but did not electrolyze, the stricture. With a proper current he would probably have a better result. SIR HENRY THOMPSON and PROF. LITTEL do not, it is true, endorse electrolysis; but he knows that neither of them has fairly tried it; they have contented themselves with the vague, unfavorable verdict of those who, having once or twice misused the current, attribute to the battery the faults which belong to themselves. THOMPSON'S conservatism and intolerance are notorious; he bitterly opposed BIGELOW'S litholapaxy (without trying it) until it was adopted by everybody else.

Possibly, as DR. FENGER says, there is no "urgent necessity" for any other method than urethrotomy and dilatation; but surgeons who have to treat many such strictures as those described in the paper under discussion, think otherwise. The methods certainly possess one point of national economic value which electrolysis lacks, namely: they assist in repressing the excess of population by quietly removing many patients.

Electrolysis "bobs up" and down only when ignorantly used; when properly employed it comes to stay.

To DR. TILLEY he would say that the action is properly termed "electrolysis;" it is the same effect as is seen in decomposition of water, and is produced by the same current. During the action of the current a white foam and bubbles come up along-side the instrument. Cocaine causes contraction of blood-vessels in the urethra as well as in the nose; but it cannot, so far as he is aware, remove cicatricial tissue in either locality.

In conclusion, he would repeat that the secret of success lies in securing chemical force and avoiding heat; the former removes the stricture easily and painlessly, the latter causes violent inflammation and sloughing.

OSTEO-PLASTIC RESECTION.

DR. C. FENGER then presented a patient before the Society with the following words: I wish to bring this patient before the Society to illustrate the results of an operation called "osteo-plastic resection of the foot," and devised by WLADIMNOFF and MIKULICZ. The operation consists in removal of the heel, soft parts and bones, and then uniting the remainder of the foot to the tibia in the position of an artificial pes equinis. As you will see, the patient has on a plaster cast from the toe to below the knee, and is able to walk in this cast without crutch or cane. He limps because the leg operated upon is two inches longer than the other one, and not because of inability to step on the leg. He will have in future to wear a high sole or heel under the well foot. While this plaster cast is being taken off I shall pass round the specimen of the removed heel and say a few words about the operation.

The patient had suffered for one year from a chronic traumatic osteomyelitis of the tarsus resulting in anchylosis of the joints, fistulæ on

dorsal side of tarsus and a loss of substance of the skin of the heel. PIROGOFF'S or SYME'S operation being out of the question, the choice was only between a supramalleolar amputation and the osteo-plastic resection. This operation was performed fourteen months ago. Union of the bones took place in four to six months, and it is only the subsequent small operations for bringing the toes in dorsal flexion that have required so long a time before the patient has been able to commence to walk.

The plaster cast being now removed, you will find the foot in the axis of the leg in equinus position, the toes dorsally flexed to a right angle with the foot. There is active flexibility of the toes and some active mobility of the foot. This mobility, however, deos not take place between the united surfaces of the tibia and fibula on the one side and the scaphoid and cuboid bones on the other; as can be seen by examining the prominences representing the rudimentary newly formed malleoli—but the mobility takes place in the joints of the metatarsus. As to the question whether these joints will be able to bear the strain of the weight of the body during walking with the foot in this abnormal position, this patient of course proves nothing as yet. But from the other cases operated upon, in all nineteen, we can conclude that we can expect a useful foot for walking. A patient operated upon by SOCIN, in Basle, is able without boot—the boot devised by MICULICZ, which I now pass round for inspection—or cane to walk, but can walk all day long and perform a farmer's work in the field. You will further notice that the walking surface of the foot being the plantar surface of the heads of the metatarsal bones and the toes, is considerable larger than the surface which either a SYME'S or a PIROGOFF'S operation would leave the patient to walk on. This, together with the active mobility of the toes, is regarded as an advantage that functionally places the osteo-plastic resection superior to the two other operations mentioned.

We find, by examining, the foot everywhere painless on pressure, and consequently there is nowhere any recurrence of the disease.

MICULICZ feared that the anterior tibial artery might not be sufficient for the blood-supply of the foot, his method of operating divided all the branches of the posterior tibial artery. I had the same apprehension, and changed the incision so as to save one of the terminal branches of the last named vessel, namely, the internal plantar artery. This fear is not unfounded, as in one of SORDINA'S cases operated upon according to MICULICZ'S description, gangrene of the foot necessitated supramalleolar amputation on the fourth day. The mortality of the operation is as yet none, but as all the nineteen cases have fallen within the last few years except WLADIMNOFF'S, and consequently have been treated antiseptically, it cannot be said that the danger is less than either in SYME'S or PIROGOFF'S operation. There is no doubt that the functional results are far superior to that of a supramalleolar amputation even if the patient will always have to wear the MICULICZ boot. Consequently it may be safe to say that osteo-plastic resection has already a legitimate place, although perhaps as yet not strictly enough defined, in the surgery of the tarsus.

The Society adjourned.

OVARIOTOMY.

BY W. C. BRITTAIN, M. D., COCHRANTON, PA.

I was called about August of last year to examine a patient, who was over fifty years of age, for an enlargement of the abdomen which had been increasing for several months, and was so evenly outlined that it was difficult to give a positive diagnosis, but I gave it as my belief that the difficulty was ovarian. In a few months it had increased so much that I had to draw the fluid off, and found it thick and heavy and by farther examination became convinced of an ovarian dropsy, and of a tumor of multilocular character.

I warned the patient of the nature of the case and that it would require frequent tappings owing to the length of time life would hold out, and the removal of the tumor was the only chance of saving her life. I drew the fluid off five times, the last time the interval being only two weeks. She then made her mind up to accept of the only chance, which was an operation.

I at this time called in consultation DR. T. B. LASHELLS, of Meadville, Pa., who confirmed my diagnosis, and we then set the day, Tuesday, March 16, for the operation. Together with DR. LASHELLS and myself, as principals in the case, I invited DR. S. M. PATTON, of this place, and DR. S. BROWN, of Utica, with DR. FISK, of Meadville, to assist us.

The operation was begun by making an incision in the median line below the umbilicus until the tumor was found and fluid drawn off with a canula in the usual way, amounting to two gallons—there having been two gallons removed two weeks before the operation.

We found the adhesions very great and the patient's strength fast failing, so that it seemed like folly to expect anything else than that the patient would die during the operation. However, the work was continued until the pedicle was ligated with carbolized silk, the tumor cut loose, and the stump dropped into the abdominal cavity, then a sponging out of cavity with carbolized water. When all bleeding was arrested, there was a piece of rubber tubing dropped into the Douglas cul-de-sac and allow-

ed to hang out of the abdominal opening with the end tied to prevent taking in of air, with the intention, on any evidence of accumulation, to cut off the end and draw off the fluid. The wound was closed with silver wire sutures and the patient bandaged and put to bed. She rallied nicely, and was entirely conscious in an hour and began to improve at once, the only trouble being vomiting, which I controlled with hypodermic injections of morphine. I used the catheter once, after which the urine passed easily. We used nourishment by enemata of beef tea for three days, then discontinued it. The bowels operated on the fifth day. The tube was removed on the sixth and the sutures on the seventh day, and from the time that the patient was placed on the operating table until the present she has not suffered one minute of inconvenience, except a few minutes vomiting. The woman at this writing, May 4, is well and walking about and has not felt so well for three years.

The tumor and contents weighed 60 pounds.

I would say that three years ago I expelled from this patient a tape-worm 50 feet in length, head and tail.

COCAINE AS AN ANÆSTHETIC IN OTHER THAN MUCOUS TISSUES.

BY E. W. MC CRARY, M. D., NASHVILLE, ARK.

There seems to be a universality of opinion in regard to the anæsthetic effects of cocaine in operations other than on mucous membranes. I have consulted a few surgeons in regard to the use of it in operations on the exterior, who doubted its utility, except on mucous tissues, and advised that its use would be fraught with some danger. Herewith, I will give you my experience with the drug, on my own person: I was wounded by the accidental explosion of a shell; a piece about ¾ in. by ½ in. entered my thigh about the middle third, a little to the left of the femoral artery, ranging outwards and downwards about 1¼ in. I sent immediately for DRS. BARNETT and HUTCHINSON, my neighboring physicians. They probed to the full depth, and found the fragment. They then introduced about ¾ drachm of solution of hydrochlorate of cocaine per hypodermic syringe; first a few drops just under the skin, then in a few minutes it was inserted deeper. After waiting 15 minutes, the grooved director was inserted to where they thought the fragment was lodged, and with a bistoury the parts were laid open. Probing with the fingers and instruments was continued for a half to three-quarters of an hour, without the least particle of pain; nothing more than if the cutting had merely been on my pants. No unpleasant effects were experienced from it, until some time after the operation, say about three-fourths of an hour, when there was considerable hyperæsthesia of the parts, which lasted about two hours. While under the influence of the drug, there was some nervous excitation or exhilaration, which passed off in a short time. No languor, stupor, or nausea followed its administration.

In this operation the doctors failed to find the fragment of shell. They concluded that it was not there, and dressed the wound. I kept my bed for several days, waiting for a union by the first intention. About the sixth day it was discovered that a sinus had formed to the depth of 1½ in. I let it remain, although suffering a great deal of pain, until the second of March. I then visited Washington, Ky., to consult DRS. W. P. HART and A. N. CORIGAN. DR. HART introduced the probe, and found the fragment. DR. CORIGAN injected a drachm of solution of cocaine into various parts around the point to be operated upon, and in about twenty minutes DR. HART commenced the operation. In a short while he extracted the piece of shell. I can truly say in this operation I felt no pain whatever, but the exhilaration or nervous excitation was present as before, and an hour after I experienced considerable local hyperæsthesia. The wound healed kindly.

Correspondence.

POISONING BY CONCENTRATED LYE.

In most houses in this western country, where hard water is the rule instead of the exception, you will find setting in the cupboard or on some table or shelf a can of concentrated lye. The kind most prevalent here is a brand known as Lewis' Lye. There is no mark or anything on the package that would indicate to one unacquainted with it that it is a terrible and most virulent poison, capable of destroying life in a short time, and when it does not do its work speedily it does it at the end of a long, lingering starvation that, once witnessed, can never be forgotten. I have thought many times that this stuff should be banished from the market. It should at least be placed on the same list with strychnine, arsenic or corrosive sublimate, and handled with the same precautions, as it is far more disastrous in its effects than any of these substances.

During the year just passed three cases have come under my notice in which the lye had been acidentally taken into the mouth. In all I think fatal lesions of œsophagus and stomach were produced. In one case, a child of two years, a small quantity was drank in shape of solution. The child lived two weeks taking no nourishment by mouth at all, and died from hemorrhage caused, I think, by perforating ulcer in the stomach. Of the other two, one has a bad stricture of the œsophagus

and the other one is lingering along between life and death with a good prospect for the former.

This last case I have treated as rationally as I could. I have given mucilaginous solutions of as bland and unirritating a nature as possible. Gave also Fowler's solution in minute doses and also eucalyptus with marked benefit, and oxalate of cerium and bismuth. This case I have hopes will recover, but a prognosis in these cases is impossible on the start, so subtle and undermining is the caustic that you cannot tell whether life or death will be the result. One thing painfully manifest is that not once in ten times is the proper antidote given at the proper time. The proper antidotes are diluted acetic acid (vinegar), soap, oil and opium, and stimulants to counteract systemic depression. Vinegar is a good antidote, and one that is nearly always available. The symptoms are marks of corrosive action, sloughs of the mucous membranes. Bloody oozing may be seen about the lips, mouth and fauces, and shreds of bloody and sloughing tissues are often vomited.

The inflammation is accompanied by the usual systemic symptoms, great depression of the powers of life, a weak, rapid pulse, shrunken countenance, cold surface, and, when dissolution sets in, coma and insensibility.

In a small proportion of cases the local mischief is not great, but the effects of the poison are expended on the nervous system.

Jos. Z. Scott, M. D.

Scandia, Kansas.

VIBURNUM PRUNIFOLIUM AMONG THE NATIVES.

About four years ago I was called to a young married lady who, being *enciente*, had in some way hurt herself and was threatened with abortion. I was holding in my hand a small bottle of viburnum prunifolium (P., D. & Co.), and was on the point of giving instructions for its administration. The mother-in-law of the lady was present, having come from her home some miles distant. Her husband, half Indian and balance Mexican, is a medicine man in these parts, in fact, a "root doctor," and the wife has learned from him some of his methods of cure. Just as I was about to administer the viburnum, this old lady, the aforesaid mother-in-law, remarked to me that if she had had her daughter at home she would not have needed my services, as she had a remedy of her own for such cases. Curious to know what her remedy was I asked her, and she replied that she used in such cases a tea made from the bark of the root of the *black haw*.

"Here is your medicine, madam," said I, "give her a teaspoonful every two hours until she takes all I shall leave." Of course the old lady was pleased. She followed instructions and everything turned out well, and I had no occasion to return.

Thus you see that these untutored and unlearned denizens of the forest are possessed of remedies unknown to the profession, as this simple remedy was not much over a decade ago.

J. F. Griffin, M. D.

Cloutierville, Louisana.

The Medical Age.

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Editorial.

AMERICAN MEDICAL ASSOCIATION.

The 37th annual session of the American Medical Association was convened in the Music Hall of the Exposition Building, St. Louis, Mo., on the 4th inst. The arrangements made for the occasion, by the local profession, were on a scale which for size and grandeur have seldom been equalled in the history of the Association. The accommodations furnished by the immense structure in which the meetings were held did much to facilitate the work of the committee on arrangements. Unfortunately, however, the attendance fell short of the expectations, and the ampleness of the accommodations proved an inconvenience rather than otherwise. This was noticeable both in the hall in which the general meetings were held, and in the rooms for the meetings of the sections. It afforded opportunity for the fullest development of the nuisance of members leaving the hall during the reading of papers. There is always at these meetings a number of restless individuals who are very ill at ease during the reading of a paper which has not the merit of spiciness, and inasmuch as this merit is very rarely a qualification of the efforts before the Association, the confusion due to the movements of these restless individuals is usually very great, and correspondingly annoying to those who attend the meetings intent on deriving some benefit from the papers as read. At the late meeting the excessive size of the halls in which the meetings were held, permitted a reverberation of both necessary and unnecessary noises which detracted very much from the profit of the occasion, and, doubtless, the fact had the effect of contributing to the meagreness of the attendance in some of the sections.

The attendance, as intimated, was quite far from being as large as had been anticipated. The number registered was less than eight hundred. This was disappointing, as it was expected the squabble on the International Medical Congress and the expected animated discussion on the report of the New Orleans Committee, would combine to attract an un-

usually large gathering. The falling off in the attendance was due to the failure of the eastern states to send their usual quota. New York, for instance, sent only 12 delegates; Massachusetts, seven; Vermont, one; Connecticut, two; Maine, six; and New Jersey, three, while some of the eastern states were unrepresented. Pennsylvania did some better, sending over fifty delegates. But the smallness of this representation from the east was not alone what excited remark. The absence from their accustomed places of those who, in times gone by, added to the strength and dignity of these meetings, was the subject of much comment. Among the delegates from the east there was a noticeable absence of men of anything like a national reputation. Their places were, in not a few instances, taken by men of a younger generation whose reputation for meritorious scientific work remains to be established. Whatever the cause may be, the fact cannot be successfully disputed that the personnel of the American Medical Association is undergoing a change. Whether this change is for the better or for the worse—whether it is for the better or for the worse that the older states and medical centres of the east are so meagrely represented in the Association—the reader will decide for himself according to his predilections.

One remarkable feature in the late meeting was the preponderance of delegates from the western and south-western states—a preponderance so great as to have made the meeting practically a meeting of the profession of those sections. Of the less than eight hundred delegates in attendance, nine of these states furnished over five hundred, Missouri and Illinois alone furnishing over three hundred.

Those who may have attended the meeting expecting to witness a lively time in connection with the organization of the International Medical Congress to be held at Washington next year, were, doubtless, struck with the absolute unanimity with which the report of the committee, which at New Orleans, last year, supplanted the original committee, was adopted. This unanimity was certainly something very surprising in view of the opposition to the committee which appeared in certain leading journals during the past year. Is it a good or an evil omen? The only interpretation of which the failure of this opposition to materialize at the meeting is susceptible, is either that it has become convinced that it was wrong and now acquiesces, or that it has washed its hands of the whole matter. Which of these is the correct one will, probably, shortly appear. As we predicted some weeks ago, Dr. N. S. Davis, of Chicago, was elected to fill the position of President of the International Medical Congress, left vacant by the death of Dr. Austin Flint.

The success of the meeting from a social point of view was very pronounced, the local profession having made ample provision in the way of concerts, balls and receptions, for the enjoyment of the delegates and their wives. Dr. E. H. Gregory, of St. Louis, was elected President, and Chicago chosen as the next place of meeting.

Dr. Gregory, the new President of the Association, is at present President of the St. Louis Medical Society, and was last year President of the Missouri State Medical Society. Although his reputation is scarcely more than local, he is spoken of as a very estimable man by those who know him. He was elected, doubtless, in harmony with the spirit of the following editorial which appeared in the daily edition of the Weekly Medical Review:

"The one essential qualification of our next President, other things being equal, should be that of never-failing loyalty to the Association and its organic law. The almost unanimous sentiment of the profession and the Association is in the direction of rebuking the malcontents of New York and Philadelphia. This rebuke can be made the more positive by selecting the President for the ensuing year from the section of the country where none but old code men and earnest upholders of the faith are permitted to be placed on guard.

"While the entire country outside of the two cities named above is almost a unit, there can be no gainsaying the statement that the West and South have never wavered in their unswerving devotion to truth and right, as they are related to Association interests. We feel sure from a free mingling with the Southern and Western delegates that we know the man to whom their thoughts most turn, and the State of Missouri and the City of St. Louis are to a man clamoring for his nomination. We know that it has not been the custom to choose the candidate for the succeeding year from the city holding the convention; but we think exceptions are always in order, and particularly at this time. A conflict was feared in St. Louis on account of the many International Congress rumblings, but peace perches her banner over all, and quiet reigns over the "medical Potomac" to-night. For this reason alone, if not for others, the American Medical Association should feel grateful to St. Louis. We then hope and trust that the Nominating Committee may in their wisdom see fit to recognize the appropriateness of making their selection on the field."

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The chief thing which has thus far distinguished the American Medical Editors' Association is its imposing name. Its history fails to reveal the slightest service done the cause of

medical journalism whose interests, it is presumed, it was organized to promote. Its *raison d'etre* has never been apparent in anything which it has achieved, unless the fact that it has occasionally enabled a few of its members to see each others faces and shake each others hands, be regarded as a sufficient excuse for its existence. That it has in it the potency of much good both to its members and to the profession at large is undeniable, but it has been sadly remiss in the development of its possibilities. The proceedings of its meetings have consisted in the reading of more or less prosy presidential addresses on irrelevant topics, and the election of officers for the ensuing year. It was hoped that the meeeting this year would be productive of some substantial good, in the direction of practical work, but again the hope has been disappointed. The president, Dr. H. O. Walker, of this city, rashly violated the precedents by reading a very interesting address, full of practical suggestions, before the meeting at St. Louis on the 3rd inst., on which the Association, however, true to its record, took no action, but incontinently proceeded to the election of its officers, and then, as usual, adjourned, each member sheepishly asking the others, as far as he could do so with his eyes, what in —— they had met for.

Dr. Walker's paper dealt with the evils of the "stuffed" subscription list, through which publishers dupe advertisers. He declared such lists to be a fraud on advertisers, inconsistent with a correct standard of professional conduct, the device of catch-penny publications and ruinous to legitimate medical journals. He descanted also on the evil of the wholesale distribution of specimen copies, which has characterized medical journalism of late years, holding such practice to be detrimental alike to the tone of the journal and to professional independence. He touched, furthermore, on the mischief attendant on the laxity of publishers in the matter of collecting the annual subscription fee, and showed up the inconsistency between the provisions of the Code of Ethics covering proprietary medicines and the practice of editors in allowing advertisements of such medicines to be received into their journals. The editor-publisher, he said, is a sort of "Pooh-Bah" who does in one capacity things which in another capacity are in more or less direct violation of implied, if not expressed professional obligations. He urged on the Association the advisability of some action looking towards a harmonizing of codical restrictions with the common practice in such matters. The paper closed with a plea for medical journalism as a profession distinct from that of the practice of medicine, holding that the ideal medical journal must be edited by a physician, who shall devote to that special branch of medicine his undivided attention.

At the close of the address the committee on nominations presented for president the name of Dr. John V. Shoemaker, of Philadelphia, and for secretary that of Dr. William Porter, of St. Louis.

On adjournment, the editors and ex-editors present, together with a sufficient number of invited guests who were neither editors nor ex-editors, to swell the number to upwards of fifty, sat down to a banquet tendered by the Medical and Library Association, of St. Louis, at the rooms of the St. Louis Club. This banquet was an affair thoroughly characteristic of southern hospitality. The tables were covered with mounds of flowers and the *menu*, which comprised some fourteen courses fortified in each instance with the appropriate liquids, was of a kind the very remembrance of which in after years, will not fail to excite a profuse salivary secretion in all whose fortune it was to partake thereof. Dr. I. N. Love, of the Weekly Medical Review, officiated as toast-master, and his voluble eloquence and the patness of the remarks with which he supplemented the toasts, were a feature of the occasion. The post-prandial rhetoric was, indeed, of a never-to-be-forgotten loveliness. The feast of reason, etc., continued away into "the wee, sma' hours ayont the twal'." It is astonishing how eloquent, and how demonstratively fraternal, "our esteemed contemporaries" can become when opportunity offers. Although many of the symptoms of nervous derangement may develope under such opportunity, aphasia has never been known to be one of them.

DIPHTHERIA NOT A SEWER-GAS DISEASE.

Dr. Erwin F. Smith, in a paper on the "Influence of Sewerage and Water-supply on the Death-rate in Cities" (Report of Michigan State Board of Health, 1885), makes the following statements with regard to diphtheria and sewerage:

1. Diphtheria is as frequent in the country as in the city, *i. e.*, in non-sewered as in sewered districts.

2. Diphtheria has been more frequent and fatal in certain rural districts than in any city whatsoever.

3. Diphtheria is not more frequent or fatal in sewered cities than in unsewered ones.

4. Of two given cities, equally well- or ill-sewered, diphtheria, during a long series of years, may be widely prevalent in the one and rare in the other.

5. Certain sewered cities have never suffered seriously from diphtheria, while others have been afflicted very much worse in recent years (*i. e.*, since the houses have been protected from sewer-air), than formerly, when with the same sewers, but much less perfect plumbing, flush-

ing, and ventilation, the sewer-air found its way into a majority of the houses.

6. When an epidemic of diphtheria appears in a city, the sewered and unsewered portions generally suffer alike.

7. No relation of interdependence can be traced between diphtheria and the sanitary state of a city, such, for example, as enables us to predict with almost absolute certainty the typhoid fever mortality of a city from a knowledge of its sanitary condition, or conversely, the sanitary condition from its typhoid mortality.

8. The annual mortality from diphtheria fluctuates greatly, and this, too, in cities where the sanitary conditions are very nearly constant.

9. Diphtheria is a disease of cold weather, being most active when putrefactive decomposition in sewers is presumably least so.

10. Diphtheria is a contagious disease, transmissible from person to person and place to place, like small-pox and scarlet fever.

11. The closing of schools and other places of public gathering checks an epidemic; and the isolation of the sick from the well, with the subsequent proper disinfection of the sick-room and its contents, extinguishes it.

12. The data relied upon to prove a connection between sewerage and diphtheria either cover too short a period to be trustworthy, or are drawn from single cities having incomplete and defective sewerage.

THE ANATOMIST'S ODE TO HIS MISTRESS.

The following verses, written by a medical teacher of New York, when a student, have occasionally appeared in medical journals, but seldom correctly. As now printed (in the College and Clinical Record), they are said to be from the author's manuscript:

I list as thy heart and ascending aorta
The volumes of valvular harmony pour;
And my soul from that muscular music has caught a
New life 'mid its dry anatomical lore.

O rare is the sound when thy ventricles throb
In a systolic symphony measured and slow,
While the auricles answer with rhythmical sob,
As they murmur a melody wondrously low!

O thy cornea, love, has the radiant light
Of the sparkle that laughs in the icicle's sheen;
And thy crystalline lens, like a diamond bright,
Through the quivering frame of thine iris is seen!

And thy retina, spreading its lustre of pearl,
Like a far away nebula, distantly gleams
From a vault of black cellular mirrors that hurl
From their hexagon angles the silvery beams.

Ah! the flash of those orbs is enslaving me still,
As they roll 'neath the palpebræ, dimly translucent,
Obeying in silence the magical will
Of the ocular-motor—pathetic—adducent.

O sweet is thy voice, as it sighingly swells
From thy daintily quivering chordæ vocales,
Or rings in clear tones through the echoing cells
Of the antrum, the ethmoid, and sinus frontales!

And stately the heave of thy maidenly breast
As the swell of the billow swift rolling to land;
And as the soft vesicular sigh in thy chest
As the moan of the ripple that ebbs o'er the sand.

But alas! 'tis with many forebodings I pen
Anatomical verses thy beauty to praise,
For I fear me my studies will never again
Bring the solace they had in my happier days.

Thou hast stolen the charm from my studio dim—
From dissection I turn with embittering wrath—
Thou hast stepped betwixt me and my skeleton grim—
Ah, lady! fair lady! why crossed ye my path!

Medical Progress.

IODIDE OF SODIUM *vs.* IODIDE OF POTASSIUM.—The disadvantages attending the employment of the iodide of potassium have long been noticed and commented upon in England; but, probably from the fact that the other iodides have never come into anything like general use here, these disadvantages have been supposed to result from the exhibition of an iodide as such, and therefore likely to follow the administration of iodides of other bases than potassium. The subject has, however, been taken up and studied of late in a more scientific manner, especially abroad, and we are thus enabled to judge on other than empirical grounds, the relative advantages of the different iodides.

The object with which any drug is given is, or should be, the relief of certain definite symptoms; but it need scarcely to be remarked that no drug, so far as one is enabled to judge, ever corresponds so exactly to any particular morbid condition as to cover that particular pathological area and no more. The effect of the drug overlaps the diseased area, so to speak, and produces, or is apt to produce, a train of symptoms not only unnecessary and undesirable, but oftentimes positively injurious. Now, when iodide of potassium is given in any beyond quite small doses—and large doses have lately been recognised as indispensable to the relief of many cases where no improvement has been effected by the smaller doses—various troublesome consequences are to be noticed, first among which is an extreme depression. We may here recall the well-known fact that potassium, and all salts into the composition of which it enters, exert this depressing influence, lowering the blood-pressure and slowing the heart. So marked is this action on the heart that large doses (one ounce and upwards) would probably cause dangerous, if not fatal, syncope, were it not for the fact that its emetic action is so far constant in these doses, as to obviate the risk of its being absorbed in quantities sufficient to show its power in this direction. The depression, nevertheless, is always present to some extent, and must often be undesirable. Sodium and its salts are comparatively exempt from this ill effect; and, therefore, *cæteris paribus*, the use of the sodium iodide is indicated wherever we think proper to employ large doses of an iodide, or where the state of

the patient is such as to render further depression unadvisable. In support of the argument that the depression is the effect of the salt, as a potassium compound and not as an iodide, the following experiments may be adduced. When muscular tissue is cut out of the living body and placed in a two- or three-per-cent. solution of a potassium salt, the chloride, for example, the muscular fibres immediately lose their irritability. Further, if healthy muscular tissue on removal from the living body be immersed in a solution of chloride of sodium, its irritability will be preserved for a much longer period than if it be immersed in pure water (KUHNE). The salt-frog, common in the physiological laboratory, is a practical instance of the stimulating action of solutions of chloride of sodium upon the living animal tissue.

Second in the list of inconveniences following the employment of iodide of potassium comes the collection of symptoms, catarrh of the conjunctival, naso-pharyngeal, and respiratory mucous membranes, and headache, known as iodism; and this is not uncommonly accompanied by catarrh of the gastro-intestinal mucous membrane, giving rise to epigastric pain and discomfort, dyspepsia and diarrhœa. An analytical study of the physiological effect of the drug will show that the catarrh of the gastro-intestinal mucous membrane is probably due to the potassium of the salt, which produces the effects alluded to above, on coming into contact with the muscular walls of the stomach during absorption. For this reason the drug will often be tolerated, if the precaution be taken to give it largely diluted with an alkaline mineral water. The coryzal symptoms are probably due to the iodine component of the salt; it is only of minor importance so far as the general health of the patient is concerned, and is variously accounted for by different authorities. The only theory as to its etiology which we shall mention is the one advocated in the latest edition of NOTHNAGEL and ROSSBACH. According to these authorities, the catarrh of the nasal and respiratory mucous membranes occurs only when either free iodine is used externally together with the iodide of potassium internally, or when the potassium iodide which is used is impure from the presence of some free iodine; in either case, it is the direct irritation of the free iodine, either in the process of excretion or when inhaled as a vapor, which causes the catarrh. If this be so, these effects will be avoided by care being taken to administer a pure potassium or sodium iodide. What has been said as to the cause of catarrh will hold good for the eruption also; the latter is the external manifestation of an irritation of the integument, just as the former is of irritation of the mucous membranes.

We are ignorant, it is true, of the exact mode of action of the iodides, and of the iodide of potassium in particular; our employment of it is empirical, and we are reduced to the vague designation of "specific" to describe its therapeutical effect. If this be the case in speaking of its action in cases of tertiary syphilis, how much more applicable is it when employed as an "alterative" or "resorbent," where its *modus operandi* can scarcely be guessed at. Be this as it may, whatever effect can be attributed as a "specific" to iodide of potassium can probably with equal justice be credited to the other odides, and particularly to iodide of sodium; while, as we have endeavored to show, the inconvenience resulting from the employment of an iodide in large doses, is minimised by the substitution of sodium for potassium of salts. The same remarks apply with few reservations to the analogous salts of bromine. Such authorities as NOTHNAGEL and ROSSBACH assert that they have used the sodium iodide almost exclusively for some years past where the drug had to be given for a long time, with results equal to those obtained from the iodide of potassium; and DR. W. H. BERG, of New York, has used it with similar good results in cases of pregnant women under the influence of syphilis.

To sum up then, we may claim for sodium iodide that (1) it can be used therapeutically for almost all, certainly the chief, purposes for which potassium iodide is used, and with similar beneficial results; (2) that sodium iodide is more assimilable than the iodide of potassium, both locally to the digestive organs, and to the general system; (3) that, as a result, many of the local and general undesirable effects which are produced by the potassium iodide do not follow the use of the sodium iodide. It is to be hoped, therefore, that the sodium iodide will be used by those whose clinical advantages allow an extensive trial of the drug, so that a more extended experience may confirm that which a limited experience seems to claim for this drug.—*Brit. Med. Jour.*, April 17, 1886.

NERVOUS DYSPEPSIA CURED BY MASSAGE AND REST IN BED.—It is not my intention to enter fully into the details of nervous dyspepsia, especially as its clinical picture is rather vague, and presents a complex of symptoms of the greatest variety. But the literature of recent years has furnished sufficient data to demonstrate that there are such affections of the stomach, which differ materially from the diseases of the chylopoietic system, otherwise described and classified, and which for the present may aptly be brought under the head of "nervous dyspepsia." Authorities are not agreed yet whether the changes are of local or central origin in the nervous system.

The cases thus far reported tend to show that some are due to functional disturbance of the pneumogastric nerves, and others of the ganglionic system. Another class of cases, again, may be referred to some abdominal condition of the central nervous system, especially cases due to mental influences, as care, anxiety, etc. From this we may see that it is no easy matter to form a diagnosis at the beginning, and that sometimes only the futility of the treatment instituted for the more common affections of the stomach and the obstinacy of the case will help to lead us on the right road. Worse than that, there are cases in which post-mortem examination alone will open our eyes, by the fact that it fails to reveal any certain evidence of disease of the stomach. Besides the difficulty of diagnosis, we may see that such cases even sometimes may terminate fatally; at least, that the treatment hitherto applied and recommended is not always followed by the desired effect. Such cases are generally looked upon as the *crux medicorum*, and not unfrequently go from physician to physician, and finally into the hands of quacks.

We all know the striking results the WEIR-MITCHELL method of treatment will accomplish in some grave cases of hysteria and neurasthenia, especially when the state of nutrition has been very much lowered. And just the experience in a few such cases has led me to believe that a similar treatment may result in much benefit in nervous dyspepsia.

MRS. B., æt. 27 years; married five years; had two children, neither of which she nursed herself. Her health up to one year and a half ago was excellent. About that time she suffered from intercostal neuralgia, which, however, was soon relieved. At times subsequently she would complain of a slight pain and pressure in the epigastrium; her appetite did not suffer any, and restriction of diet would soon relieve her of those feelings. About the first of August, 1885, the patient experienced shortly after meals a severe pain in the left epigastric region, which was frequently followed by vomiting. She would not admit any error in her diet, and it was impossible for me to find any other cause for her symptoms. Repeated examinations of the urine and sexual organs revealed nothing abnormal. She could bear very little food, and the various medicinal agents which her gastric symptoms and pain called for had merely a palliative effect; pain and vomiting would frequently recur. I ordered an exclusive milk diet which had the effect of lessening the pain and vomiting; in fact, subdued it entirely, until she again tried more substantial food. This milk diet she kept up for about six weeks, which markedly improved her symptoms, although the emaciation made steady progress. Although MRS. B. exhibited, *pari passu* with her gradual emaciation, some irritable disposition and signs of weakness, yet she never showed any real symptoms of hysteria or neurasthenia. About the beginning of October she visited her parents, living in a large city. Her emaciation continued. Indeed, in December I found her reduced to a skeleton, and could hardly suppress the idea that a deeper organic change was at the bottom of her complaint. I accidentally dropped the remark in presence of patient that general massage and rest in bed, with proper feeding, might possibly give her some benefit, when she enthusiastically took up the idea, having heard of some splendid results by WEIR-MITCHELL'S plan of treatment in cases of hysteria and neurasthenia.

As her nurse was not just ready to begin massage, I again put her on milk diet for about a week. During that time she only vomited once after having taken bread with her milk; her pain also had decreased considerably. The beginning of the treatment was fixed for December 24, and as she was free from any signs of hysteria and imbued with such implicit confidence in the result, the treatment was carried out at her own home, which in hysterical cases should absolutely never be undertaken.

In the first four days MRS. B. complained of slight pains and pressure over her stomach; turning on her right side would especially increase her pain, but from that time on she experienced a feeling of unwonted well-being and enjoyed excellent sleep. Her bowels, which before showed a tendency to constipation, began to move regularly, and after the sixth day she indulged in a bill of fare of rather a liberal selection. As she reached the tenth day, the end of the proposed period of trial, she concluded to continue the treatment up to the end of six weeks, finding that the stomach made not the slightest remonstrance against those enormous quantities of food which MITCHELL and PLAYFAIR urge upon their patients. In this manner she uninterruptedly followed the road to recovery, and although she has not accumulated such a mass of adipose tissue as some would perhaps lay up, she now presents a picture of perfect health.—DR. M. STAMM, in *Jour. Am. Med. Association.*

THE HYGIENE OF THE NEWLY BORN.—The following instruction to mothers and nurses, prepared by a commission composed of MOUTARD, BERGDRON, PARROT, BLACHEZ, and DUJARDIN-BEAUMETZ, have been issued by the head of the Department of Public Charities, Paris:

1. Till the appearance of the first teeth, *i. e.*, between the sixth and seventh months, the only food of the infant should be milk, that of the mother preferably, if she be in good condition, otherwise, that of a wet nurse. It is very dangerous to give an infant solid food of any kind during the first months of its life.

2. The child should be offered the breast about once in two hours, and less often in the night.

3. In the event of inability to provide woman's milk, the milk of the cow or goat may be substituted. This milk should be given warm, diluted with one-fourth part water, and slightly sweetened. At the beginning of the fifth month the milk may be taken pure. All other liquids employed to dilute the milk (thin gruel, bread-water, barley-water) are injurious.

4. In feeding the infant, glass nursing bottles should be employed. These, especially the tubing and the mouth-piece, should be thoroughly cleansed every time they are used. Never allow nurses to resort to those "sugar-teats" with which some mothers seek to appease the cries of the infant, and which are sure to produce canker, and disorder the digestion.

5. It is not till the sixth or seventh month that one should begin to allow farinaceous substances with milk, such as bread, baked flour, rice, arrowroot, mealy potatoes; these supplementary foods should always form a considerable part of the infant's dietary towards the end of the first year, to accustom the child to weaning. Weaning ought not to be thought of till the first twelve or sixteen teeth have pierced the gums, while the infant is in a good state of health, and during the lull which follows an eruption of teeth.

6. Every morning the "toilet" of the little one should be made before suckling or feeding; this toilet consists: (1) in washing the child's body, and especially the genitals, which ought always to be kept clean; (2) in scrubbing the head, on which it will not do to let scurf or dandruff accumulate; (3) in changing (at least every second day) the child's underclothing; (4) in giving a warm bath in which the infant should be held five or six minutes. The belly band ought to be kept on during the first month.

7. Swaddling clothes which cause compression of the body, should be interdicted. The

more freedom the young child has in its movements, the more robust it becomes, and the better its development. All swathing which encumbers the neck and head should also be discarded.

8. The infant should be protected against the injurious effects of excess of cold and heat, whether out doors or in the house; within doors the air should be renewed several times a day.

9. It is not safe to carry the babe into the open air before the fifteenth day, unless the temperature is very mild.

10. The child ought not to be allowed to sleep in the same bed with its mother or nurse.

11. The bed of the infant should be composed of oaten straw, soft thatch, or husks; the cradle should have curtains during the ffrst months of infancy, and especially during the cold season, to avoid currents of air, but these curtains should never be completely closed. The babe ought not to be rocked.

12. There should not be undue haste in teaching the infant to walk; it should be allowed to creep on the floor and help itself up; walking carts and baskets should be discountenanced.

13. The least indisposition on the part of the infant (colic, diarrhœa, vomiting, cough) should be at once attended to.

14. As pregnancy has the effect to render the milk less nutritious, in case of pregnancy, every nursing woman should cease to suckle he infant.

15. It is a good plan to vaccinate infants during the first three months after birth, or during the first few weeks, if an epidemic of smallpox is prevailing.—*Boston Med. and Surg. Jour.*, April 8, 1886.

INHALATIONS OF COLD AIR IN TYPHOID FEVER.—DR. ALEX. M. SOKOLOFF, searching for some means of intensifying the antipyretic action of cold air, resolved upon undertaking a series of experiments on inhalation—that is, on introducing this cooling agent into the lungs, into "one of the regions of maximal heat-formation." His observations were made in twenty-three cases of enteric fever, five of which were of an abortive type, the remaining eighteen being moderately or very severe (two ended fatally). The patients were made to inhale from a NIEMEYER'S cold-air inhaler (see P. NIEMEYER'S Aertzl. Spretchs., vol. vi., part 3, p. 129), slightly modified by the author. About 510 inhalations were made in twenty-three cases, the number of sittings in an individual case varying from six to forty-two; the number of sittings daily from one to three; the duration of a sitting from five to thirty minutes; and the temperature of the air from −2° to 10° R. From these observations the author draws the following conclusions:

1. Inhalations of cold air produce a greater or less depression of febrile temperature; but, contrary to the author's expectations, their effect is comparatively weaker and more fleeting than that of cold-water baths, and even of cold air baths. The antipyretic effect of the inhalations varies according to certain conditions. (*a*) *The time of the day.* The least decrease of the febrile temperature, varying from 0°.2 to 0°.5 C., is observed when the inhalations are made between noon and 6 p. m. The strongest effect, varying from 0°.5 to 1°.3 C. (after a single sitting), is observed between 7 p.m. and 10 p.m. (*b*) *The stage of the disease.* The slightest and shortest effects are observed during the two first weeks of enteric fever, when the average daily decrease (after several sittings) falls short of 1° C., and when the effect of an individual sitting does not last longer than one and one-half to two hours. During the next weeks of the disease the effects are stronger (often 1° C., after a sitting), and last several hours. (*c*) *The duration of the inhalation* is but of slight importance. A sitting of five to ten minutes' duration gives the same decrease of the febrile temperature as a sitting of twenty minutes' duration. [The author attempts to explain this rather strange circumstonce by fatigue of the lungs, in consequence of which the patient makes accelerated and superficial respiratory movements.] At all events, the greatest antipyretic effects are obtained from sittings of twelve to fifteen minutes duration. (*d*) *The temperature of the air inhaled.* A temperature of −2° or −3° R. gives almost the same decrease of the febrile temperature as the temperature of −4°, −5°, or −6° R. Relatively stronger effects are obtained from temperatures of −8°, −9°, −10° R. [It would seem natural to expect *à priori* that the antipyretic effect ought to be greater, the lower the temperature inhaled. It proved, however, otherwise. The relatively small effect of lower temperatures is attributed by the author to a comparatively shorter duration of the sittings, the patients being unable to perform prolonged inhalations on account of unbearable toothache occurring in consequence of intense cooling of the mouth and teeth.] (*e*) *The mental state of the patient.* Both depression and excitement (often observed in typhus patients) diminish or even entirely suppress the antipyretic effect of the inhalations.

2. The inhalations produce retardation of respiration (in average, four a minute) and pulse (in average, six beats a minute). At the same time, breathing became deeper, and the pulse fuller.

3. The inhalations relieve dryness of the mucous membrane and skin.

4. Inhalations of cold air promote resolution of the bronchitis which often complicates enteric fever, and increase the process of ventilation in the lungs.

5. Hence the inhalations lead to an improvement in the patient's general state, sleep and appetite.

6. Inhalations of cold air act antiphlogistically on the inflamed respiratory tracts, and hence may be employed as a rational therapeutic agent in the treatment of pulmonary inflammation.

7. Systematic inhalations of cold air may prove of use also in chronic bronchitis, asthma, and emphysema.

[In the Meditzinskoie Obozrenia, No. 13, 1884, p. 12, DR. V. F. SPRIMON points to the disadvantage of the use of the cumbrous and heavy NIEMEYER'S inhaler, and advises a trial, in winter time, of inhalations of cold air conducted from a window through a piece of tubing, the patient inhaling the air by means of a mouthpiece from a WALDENBURG'S apparatus. In the Vratch, No. 14, 1884, p. 242, PROF. V. A. MANASSEIN points out that SOKOLOFF'S obser-

vations are important as a new illustration of the fact that cool air of itself is harmless to the febrile patient, and that the well-known fears entertained as yet by the public at large, and even by medical men, in regard to "chilling the patient" are entirely groundless. Like SPRIMON, MANASSEIN also finds any special cooling apparatus superfluous. Valuable information is collected in DR. R. NEALE'S Medical Digest, sect, 257: 2.—*Rep.*]—*Jour. Amer. Med. Association.*

THE SUBCUTANEOUS INJECTION OF SALICYLATE OF CUCAINE IN ASTHMA.—The following cases, in which asthma was treated by the injection of salicylate of cucaine, are given by PROFESSOR MOSLER, of Greifswald, in the Deutsche Med. Wochensch., No. 11, 1886.

A young woman, 23 years of age, whose father, brother, and sister had suffered from phthisis or asthma, had the first attack of the latter in her twelfth year, after a chill taken in consequence of a cold bath. The attacks grew worse as time went on, beginning usually between six and eight o'clock in the evening. Premonitory symptoms were anomalous sensations in the extremities, particularly numbness and cold. Then followed general discomfort, and severe pressure in the epigastrium. A hard dry cough developed gradually, which, however, became easier when a great quantity of mucous sputa was got rid of. In about 12 to 24 hours after this the attack ceased. When she came to PROFESSOR MOSLER, though she appeared weak, there was nothing anomalous in the lungs or heart. Pressure below the ensiform process caused pain. During her first attack after admission, four centigrammes of a five-per-cent. solution of salicylate of cucaine were injected, but without giving any relief. The next morning another attack occurred, and four hours after its commencement an injection similar to the previous one was made, with the result that the attack entirely ceased in the course of a quarter of an hour. But in five hours she had another attack, which did not yield to a fresh injection. A fourth attack occurring in the following night was at once stopped by an injection, the patient passing the rest of the night quietly. No other attack occurred until 5:00 p. m. next day, and this was less severe. Injection of half the above quantity gave nearly immediate relief. On the following day the last injection was made, on the patient complaining of a disagreeable spasmodic cough that had lasted a couple of hours, though otherwise she felt quite well. Five minutes after the injection, the cough ceased. No other attack occurred, and the patient was discharged a week after admission. In a fortnight after this, she wrote to say she was perfectly well.

The other case was that of a laborer, aged 23, who complained of shortness of breath and violent distressing fits of coughing, generally lasting two or three days. The patient was a muscular man. The heart and lungs were sound. During an attack there was rhonchus in both lungs. There was no expectoration. Almond water with morphine was given, and inhalation of gum-benzoin prescribed, without effect. During the next attack a subcutaneous injection of salicylate of cucaine (4 centigrammes) was made. The difficulty of breathing ceased at once. But the patient complained of dizziness and blackness before his eyes for two or three hours after. For five days he was quite well. On the sixth day a fresh attack yielded to injection, leaving him, however, dizzy, and complaining of cold and general anxiety for 45 minutes. In six days the last attack was stopped by the same method, the after-effects not occurring.

PROFESSOR MOSLER hopes that this method will receive a fair trial. Without asserting it to be a radical measure for this trying complaint, he believes that in individual cases it puts a stop to asthmatic attacks speedily, and renders their recurrence less frequent. His attention had been directed to the subject by an article by DR. BESCHORNER, of Dresden, in the Monatsschrift für Ohrenheilkunde, so wie für Nasen-, Rachen-, Kehlkopf-und Luftröhrenkrankheiten, No. 10, 1885.—*London Medical Record.*

THE TREATMENT OF PREMATURELY-BORN INFANTS BY WARMTH AND ARTIFICIAL FEEDING.—In the case of prematurely-born infants, as also in those weak and delicate from other causes, the importance of maintaining a comparatively high temperature has for some time past been advocated. M. TARNIER (Arch. de Tocologie, September, 1885) draws attention to the use of "corveuse" and "gavage." The "corveuse" is an artificially warmed cradle, and M. TARNIER keeps it at a temperature between 30° and 37° C. (86° F. and 98.6° F.), the average being about 32° C. (89.6° F.). Generally speaking, the more feeble the infant the higher should the temperature be maintained. CREDE (Archiv, für Gynäkologie, Bd. xxiv., Heft. i.) has long employed for the same purpose, in the Leipsig Maternity hospital, a small bath made of copper, with double bottom and sides. Into the space between the two walls of this double casing about 384 gallons of water, warmed to a temperature of 120° F., is introduced to the opening at the bottom. If the warm water is renewed every four hours, the temperature in the interior of the bath falls little, if at all, below 89° F. One thermometer placed below the infant and the sides of the bath, and then in the water in the double casing, allows the temperature to be readily regulated. After the bath has been warmed, the infant, wrapped in cotton or wool flannel, is placed inside on a cushion, and covered with a small feather quilt, so that the space inside the bath is completely filled, and only the face of the child remains uncovered. The child is taken out as seldom as possible, only for the purpose of being washed or placed to the breast. Artificial feeding, which is often necessary, is accomplished while the child remains in the bath or warm (open) box The latter is placed on a low table near the fire, and is protected from draught and strong light, but remains uncovered, so that the infant continually breathes fresh and cool air.

In practising "gavage," M. TARNIER (International Journal of the Medical Sciences, Jan., 1886, p. 329) uses an apparatus which is in miniature the same as that employed by DR. FRANCHER for adults. It consists simply of a red caoutchouc catheter (size No. 18. Chavrière), to the upper end of which is fixed a small glass cup or funnel. In employing gavage the child

is held on the knee of the operator, the head slightly raised, the catheter is oiled, and then introduced as far as the base of the tongue, when the child, by the instinctive movements of deglutition, carries it on to the entrance of the œsophagus. After the catheter has passed a distance of six inches, we may conclude it has reached the stomach. The nourishing liquid is now poured into the glass funnel and soon by the action of gravitation penetrates into the stomach, leaving the funnel and catheter empty. In withdrawing the catheter, which should be done after a few seconds, it is needful to do so rapidly, as otherwise the fluid injected follows the catheter, and is rejected by regurgitation.—*Exchange.*

Prophylaxis of Hydrophobia.—In our issue of last week, page 450, we reproduced M. Pasteur's communication to the Académie des Sciences, on the "Prevention of Hydrophobia by Inoculation." Since the date of that communication three of the Russians suffering from wolf-bite, who were then under treatment, have died, and M. Pasteur has felt called upon to make a supplemental statement at the session of the Académie on the 12th of April, a report of which appears in the Gazette Hebdomadaire of April 16th.

He said that there had been treated, under his supervision, 726 individuals bitten by rabid animals. Up to the first of March, last, the number of patients so treated was 350.

Of these 726 persons, 688 had been bitten by rabid dogs, and 38 by rabid wolves. The two groups should be kept separate, in order to judge fairly of the method. With the exception of the little girl Pelleier, every one of the 688 persons suffering from the bites of rabid dogs was in good condition, despite the fact that more than half of those cases had passed the dangerous period.

Of the 38 Russians who had been treated, or who are still under treatment, 3 have died of rabies; but it is impossible to predict what may happen later. In Russia it is proverbial that any one bitten by a mad wolf is irrevocably lost, yet of the 19 Russians from Smolensk, whose treatment is terminated, 16 have returned to their homes apparently out of danger.

The observed facts have demonstrated:

1. That the period of incubation of human rabies after inoculation by the bite of a rabid wolf, is much shorter than after the bite of a mad dog.

2. That the mortality resulting from the bites of rabid wolves is greater than in the case of bites of dogs similarly affected. This is apparently due to the location and great depth and extent of the wolf-bite. Inoculations made in dogs, rabbits, and guinea-pigs, with the spinal cord of the Russian who first succumbed, showed that the virus in this case was apparently no more virulent than that of rabid dogs.

In all instances, however, and especially in the case of wolf-bite, it is desirable that the patient should submit himself to the preventive treatment at the earliest possible moment. Thus, the 19 Russians from Smolensk did not arrive for treatment till the fourteenth or fifteenth day after that on which they were bitten, whereas, according to M. Pasteur, the treatment should have begun a week earlier.

M. Pasteur stated, further, that he is at present prosecuting experiments with a view so to modify his process as to render it, if possible, more applicable to cases of bites of rabid wolves.—*Philadelphia Medical News*, May 1st, 1886.

Helenin in Diphtheria.—Dr. Juan Beltrán Obiol has communicated to La Cornica Médica, a paper on the subject of the successful treatment of diphtheria by means of helinin. He refers to a work by Dr. E. Pilatte, published in Paris, and entitled "Recherches expérimentales sur le Bacile de la Tuberculose," in which it is stated that the three substances most destructive to cultivations of bacilli are, in the order of their activity—(1) Sulphuretted hydrogen; (2) corrosive sublimate; (2) helenin. The first two of these are, of course, out of the question for diphtheria. Helenin, therefore, is the only one which can be used for this purpose. Dr. Obiol is very particular about the helenin he employs, for he finds many specimens in the market which are exceedingly impure. When pure, he says, it is perfectly white and flocculent, like sulphate of quinine. It has an aromatic odor and a bitter aromatic taste. It is insoluble in water, and does not communicate to it any opalescence. It is very soluble in alcohol, and even more so in ether, the solution being clear, colorless, and depositing no sediment. It is also soluble to the extent of 2 per cent. in oil of sweet almonds. Specimens are apt to be granular, heavy, yellowish, only slightly bitter, with a resinous odor, and they sometimes impart opalescence to water, and deposit a precipitate from their solution in alcohol and ether. Another substance sold as helenin, but which is said to be a derivative of shalin and not to possess the antiseptic properties of helenin, is crystalline, only slightly soluble in ether and alcohol, and not at all in oil of sweet almonds. The pure drug is ensured by prescribing "helenin (Baeza)." The author's plan was to apply powdered camphor on the end of the finger to the diphtheritic patches, and then to paint them over with a solution of helenin in oil of sweet almonds. This was done at first every four hours, and quickly produced complete destruction of the false membrane. The drug was also given internally in doses of one grain and a half to children of six years of age, care being taken to administer the powder after the application, as the latter sometimes induced vomiting. The author had great success with this method of treatment, but he insists on the necessity of the local applications being made by the medical man himself as far as possible, and not left to the parents. He found that when he commenced the treatment on the first day of the disease, a single day was sufficient to effect a cure; when he commenced on the second day, two or three days were required; when on the third or fourth day, from six to nine days were needed; but when he did not see the patient till the fifth or sixth day, the hope of effecting a cure was not very great. In his experience albuminuria did not occur. The only unpleasant action of helenin is its constipating effects, against which it is necessary to guard by giving laxatives.—*London Lancet.*

THE DIETETIC TREATMENT OF CHRONIC BRIGHT'S DISEASE.—DR. W. H. KATSENBACH opened the general discussion with a brief paper, in which he said the indications for treatment were the maintenance and improvement of nutrition and prevention of uræmia. Uræmia manifested itself not only in the nervous system, but also in the digestive, causing loss of appetite, vomiting, not infrequently, diarrhœa, and for the relief of these symptoms the regulation of the diet was important. Those articles should be chosen which were most easily digested and best assimilated. He had employed milk as an exclusive article of diet with very good results in a number of cases, two of which he related in detail. He gave from three to five or more pints in the twenty-four hours, in equal quantities at intervals of from two to four hours. It might be necessary to add a mineral water, and at the beginning to give a laxative to prevent the formation of a fæcal mass.

DR. BEVERLY ROBINSON read a paper and said the important question was to determine what might be the relation between the amount of urea excreted and the nervous symptoms; also the relation of albumin in the urine to such symptoms, and the effect of diet in increasing or diminishing the amount of these ingredients in the urine in cases of Bright's disease. He had experimented in a few cases of Bright's disease in St. Luke's Hospital, giving at first in most cases milk alone, afterward farinaceous, light, or full diet. It was shown that meat did not invariably increase the amount of albumin in the urine in chronic Bright's disease; in the second case there seemed to be no relation between the diet and amount of albumin; in the first, milk diet seemed to diminish its amount, while farinaceous and light diet caused its increase. He had no doubt that milk was the best single diet which could be given to patients with chronic Bright's disease, but there were limitations to its usefulness, and certain persons could not take it. If the patient became anæmic, the important point was to increase nutrition rather than to diminish the quantity of albumin in the urine.

DR. GOUVERNEUR M. SMITH read a brief paper, and quoted from one which he had read on this subject before the academy in 1869, in which he had expressed essentially the views which he entertained to-day. The question of the dietetic management of chronic Bright's disease was of the greatest importance, but a particular diet could not be named which would best meet the indications of all cases.—*N. Y. Med. Jour.*, April 24, 1886.

HYOSCYAMINE IN CHOREA.—The efficacy of hyoscyamine as a remedy in the treatment of chorea has been illustrated in a case under the care of PROF. DACOSTA, at the Pennsylvania Hospital, U.S.A., and which is described in the Boston Medical and Surgical Journal for Jan. 23d last. A boy, eleven years of age, was admitted into the hospital referred to, suffering with chorea to a degree that rendered him completely helpless; he was unable to walk or to feed himself, and he had not sufficient control over his powers of speech to convey even the nature of his wants. At night, also, complete muscular repose was not obtained, and his condition generally was a pitiable one. Hyoscyamine was administered, at first in doses of one two-hundredth of a grain, this amount being after a short time doubled; three doses per day were given. The effect was most marked, the patient being able to leave his bed and walk about the ward in four days; and his condition underwent steady improvement, until, three weeks from the date of his admission, his muscular system had regained its normal condition, and locomotion was in every way natural. In a clinical lecture on this case DR. DACOSTA explained that he was induced to resort to trial of hyoscyamine in connection with it owing to the fact that the drug had been employed with such signal benefit in cases of tremor; and it is extremely satisfactory to find that the results obtained were of so encouraging a character. As compared with the method of treatment by arsenic, the time gained through employment of hyoscyamine is very marked, but it remains to be seen how far the latter rather than the former remedy secures permanence of the effects produced so much earlier, and with such apparent ease.—*Medical Press and Circular.*

BROMINE IN DIPHTHERIA.—DR. P. HESSE, of Griefswald, calls attention to the fact that bromine, as a local medicament in diphtheria, has held its own, for some 20 years, better than any other remedy, and recommends for inhalation the following solution:

> Pure bromine,
> Potassium bromide, ää 1 to 2 parts.
> Distilled water, 400 parts.

Without regarding bromine as a specific, HESSE maintains that, properly applied, it is less fallible than other medicaments. Certain precautions and limitations in the application of the treatment are indicated, viz:

1. Treatment to be instituted as early as possible.
2. Direct application by the brush should not be made.
3. The frequency of application, and the concentration of the solution used for inhalation should be conditioned by the severity of the case, and the degree of congestion induced in the pharyngeal mucous membrane.
4. The solution should always be fresh, and, the treatment should be accompanied by ice-cold applications to the neck.
5. The method is contra indicated in laryngeal diphtheria, in bronchitis, and in affections of the lungs.—*Deutsches Archiv f. klin Med.*, March 24, 1886.

SALICYLATE OF SODIUM IN IRITIS.—At the meeting of the Baltimore Academy of Medicine, held February 16, 1886, DR. SAMUEL THEOBALD referred to some interesting results he had recently obtained by the use of salicylate of sodium in iritis, occurring in patients with a history of inflammatory rheumatism.

Three weeks ago a young lady called to see him. She had a most intense plastic iritis, pupil perfectly immovable. She had only perception of light, and could not count fingers at the ordinary distance. She was ordered sodium salicylate, and in a few days she obtained much

relief. This salt was then withdrawn and iodide of iron ordered. She did well until the end of several days, when she reappeared, complaining of the same trouble, which increased in intensity until, at the end of two days, she was in the same condition as originally. The salicylate was repeated, as well as the atropine drops locally, and mercurial inunctions to temples. Cathartics were ordered, and in two days she was so very much improved that vision equalled $\frac{20}{64}$, and the media were sufficiently clear to permit satisfactory inspection of the optic disk.

She had had some glaucomatous tension, but this did not prevent his ordering atropine, nor interfere with the physiological and therapeutical action of the drug.—*Maryland Medical Journal*, March 16, 1886.

Myrtol.—Myrtol has only been, hitherto, studied as a curiosity. Dr. Linarix, in his doctoral thesis, De l'Emploi du Myrtol, gives a complete account of the properties of this substance. Myrtol is both an antiseptic and a disinfecting agent. By its presence, it prevents the decomposition of fermentative and putrescible organic substances; applied to the skin, it does not produce the slightest irritation, if the epithelium be intact. If there be a slight abrasion, a few drops produce a very trifling burning sensation, which quickly goes off. Myrtol stimulates the digestive functions; all who use it find their appetite increased. In small doses it acts as a sedative. It is eliminated by the lungs and kidneys, and has also a powerful balsamic action, but is more easily tolerated than most balsams. Its use is not followed by dyspepsia, nor by any of the other troubles attending the use of balsams in general. Dr. Linarix says that myrtol does not produce the same result at all periods of the affections of the respiratory system; in subacute and chronic catarrhal affections, it should be administered when fever has subsided; then the sputa becomes less abundant, also less purulent. Six capsules daily, each containing fifteen centigrammes of myrtol, form a moderate dose, which should be taken before meals.—*Brit. Med. Jour.*

Iodide of Potassium in Spasmodic Asthma.—Dr. Ormerod has tabulated the details of 36 cases of spasmodic asthma treated by the internal administration of potassium iodide, and expresses his results as follows:

The iodide was given alone, or if in combination only after the effect of the uncombined drug had been watched. It proved a failure in nine out of the 36 cases—*i. e.*, only in 25 per cent. Its good effects were not limited to the uncomplicated cases. The cases in which the asthma appeared to be distinctly secondary to chronic lung disease are indeed too few to say much about; but in some of them at least it did good. The symptoms most amenable to the drug were certainly the nocturnal attacks of dyspnœa; its effects on them was often remarkable; thus in many cases they disappeared altogether; in others they were much reduced in frequency and severity. But a troublesome cough, or a certain shortness of breath on rising in the morning, often persisted. That the nocturnal attacks were really controlled by the iodide was shown by the unwelcome, but noteworthy fact, that they recurred (in many cases) whenever the drug was stopped. It has, therefore, the effect of relieving rather than curing. Five or ten grains three times a day suited best in most cases; in some a larger or smaller dose did better. In some an increase of the dose did good for a time, but the effect seemed to wear off.—*The Practitioner*, April, 1886.

Krull's Method of Treating Catarrhal Jaundice.—M. R. Longuet (Union médicale) gives an account of this treatment, and of Löwenthal's recent confirmation of its efficacy. It seems that Krull published an account of his method in 1877, but that it excited little attention until Löwenthal took it up. It consists simply in the administration of cold water; the first injection, of one or two quarts, at a temperature of 59° F., is thrown in gently and retained as long as possible; on the succeeding days an enema is given every morning, the temperature being gradually increased to 71.6° F., which is not exceeded. The cure is generally accomplished by the fourth day, and in no instance have more than seven injections been found necessary. No failures are mentioned, although several of the cases were of long standing and had resisted the most varied treatment, including the use of that *ultima ratio* of the Germans, Carlsbad water. No medicine is allowed to be taken, and the diet is restricted to vegetables. Löwenthal, who who used injections somewhat colder than those mentioned, tried the method in forty-one cases, and he absolutely confirms Krull's report of its efficiency.—*N. Y. Med. Jour.*, May 1, 1886.

Inhalations of Nitrogen.—Dr. Valenzuela's increased experience of inhalations of nitrogen leads him to speak very highly of their efficacy. In pulmonary tuberculosis, in chronic bronchial and alveolar catarrh, and in essential and symptomatic asthma, the results have been most conclusive. The inhalations must be given four or more times in the twenty-four hours, and the nitrogen should be mixed with a certain quantity of air. In tuberculosis, the progress of the disease is arrested, and the existing lesions repaired, if one may judge by the disappearance of the symptoms and physical signs. The following case is an example: A servant girl, aged 23, was admitted, with cough, dyspnœa, want of appetite, wasting, and sweats. There was dulness in the left subclavicular region and supraspinous fossa. Vesicular murmurs were absent; there were moist and subcrepitant rales, and cavernous breathing. On the right side was harsh, rough, exaggerated breathing. The sputa contained elastic fibres. She had night-sweats. The patient began treatment on July 10, and on Sept. 3 was discharged, with percussion-sounds and vesicular murmur everywhere normal, the rales and cavity-sounds having quite disappeared. Three months afterwards, she was found to be in perfect health.—*London Med. Record.*

Cold Bandaging of the Leg in Insomnia. Dr. Von Gellhorn has found the following plan very useful in inducing sleep in persons

who suffer from insomnia: A piece of calico, about eighteen inches wide and two and three-quarter yards long, is rolled up like a bandage, and a third of it wrung out of cold water. The leg is then bandaged with this, the wet portions being carefully covered by several layers of the dry part, as well as by a layer of gutta-percha tissue, and a stocking drawn on over the whole. This causes dilatation of the vessels of the leg, thus diminishing the blood in the head and producing sleep. It has been found by WINTERNITZ that the temperature in the external auditory meatus begins to fall a quarter of an hour after the application of the bandage; the decrease amounting to 0.4° C., and the normal not being reached for about one and a half to two hours afterwards. The author has employed this means of procuring sleep for a couple of years, and finds it especially useful in cases where there is congestion of the cerebral vessels. Sometimes he has found it necessary to re-apply the bandage every three or four hours as it dried.—*Amer. Med. Journal.*

PALLIATIVE TREATMENT OF UTERINE CANCER.—DR. GACHES SARRANTE, in an article on the treatment of inoperable uterine cancer, thus summarizes the results of his experience:

In cancer of the uterus, frequent dressing with liquids, powders, or other antiseptic agents present the following advantages:

1. When regularly applied, they suppress absolutely the hemorrhages, even when rebellious.
2. They modify the nature of the lesion by removing the putrescent products which form on its surface, and give it the appearance of a healthy sore.
3. At first they calm the pains, which later return with increased intensity, finally to cease definitely.
4. They prevent the absorption of infectious products and thereby greatly improve the general health of the patient.
5. They moderate the extension of the lesion, and prevent extension by contiguity to the vagina and bladder.
6. Finally they permit the patient to live the life of the world at large, and, so to speak, to dissimulate their malady.—*Nouvelles Arch. d. Obstet. et de Gynéc.*, March 25, 1885.

REMEDIES FOR SKIN-DISEASES IN THE FORM OF SPRAY,—DR. HARDAWAY (Journal of Cutaneous and Venereal Diseases, vol. iii., No. 4) has in generalized pruritus had good results from spraying a lotion of the following sort: Carbolic acid (three to four drachms), glycerin one ounce, and water, a pint. After the bottle of the atomiser has been filled, he sometimes directs the patient to add from five to ten drops of oil of peppermint. The atomizer bottle should be thoroughly shaken before the bulb is compressed, in order to diffuse the peppermint through the mixture, as otherwise it would merely float on the top. In many instances the spray is far superior to mopping on lotions with a sponge or rag, being neater and less troublesome, getting the remedy more evenly and uniformly applied over the surface, and usually giving more speedy relief.—*Lond. Med. Record.*

THE TREATMENT OF CHOREA.—DR. JOFFROY recommends the systematic administration of chloral, in combination with the use of the wet pack. To children over ten years of age he gives one drachm of chloral per diem, divided into three doses, after meals; 15 grains are given after breakfast, 15 after dinner, and 30 after supper. In children aged six or seven years, from 30 to 40 grains a day are usually sufficient, but each dose must be large enough to produce sleep in about fifteen minutes after its administration. He has never seen any unpleasant effects caused by the drug other than a roseolous eruption. In very severe cases the writer has the children wrapped in wet cloths at a temperature of 50° to 53° F., for two or three minutes, morning and evening. They are rubbed while in the pack, and are then covered up warmly and kept lying down for half an hour.—*Deutsche Medicinal-Zeitung.*

CIMICIFUGA FOR HEADACHE.—The severe headache which usually ushers in the menstrual period, is relieved by cimicifuga. Congestive, nervous and rheumatic headache, and those resulting from alcoholic excesses and loss of sleep, also frequently yield to this drug. It is best given in small doses, say ℞x of the fluid extract, frequently repeated. It has been found useful in the chorea of children.—*Med. World*, April, 1886.

HEMOSTATIC POWDER.—PROFESSOR BONAFOUX, at a recent meeting of the Academy of Medicine, at Paris, read a paper upon a powder which possesses great hemostatic powers, and is capable, it is said, of arresting the bleeding of large arteries, so that it will prove serviceable in important surgical operations. The powder is prepared by mixing equal parts of colophony, carbon, and gum arabic.—*Medical and Surgical Reporter*, March 13, 1886.

BORIC ACID IN CYSTITIS.—DR. SCHIDLORSKY, a Russian physician, recommends boric acid in the treatment of cystitis, not only as an injection into the bladder in the form of a 2-per-cent. solution, but given internally. He recommends a dose of 10 grm. (?) three times a day. He has successfully treated two cases in this way, without observing any disagreeable consequences.—*Exchange.*

FRANCISCEINE.—Francisceine, according to the British and Colonial Druggist, is proposed as the name of a new alkaloid which has just been extracted from the Brazilian manaca root, the produce of the Franciscea uniflora and certain other species. The principle in question has a very powerful purgative and diuretic action, and is also possessed of diaphoretic and emmenagogue properties.

MENTHOL IN NASAL REFLEX NEUROSIS.—DR. ROSENBERG, of Berlin, recommends the application of gelatin bougies containing one-sixth grain of menthol for the relief of reflex neuroses due to nasal disease.—*Weekly Med. Review*, April 24, 1886.

The Medical Age.

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Original Articles.

A NEW SKIN DISEASE.*

BY J. E. CLARK, M. D.†

It may be that the caption of this article, "A New Skin Disease," will have the effect of exposing a certain amount of ignorance on the part of its author, as dermatological specialists may from the description at once assign it "a local habitation and a name" in some subclassification of ordinary cutaneous eruptions. So far as I am concerned, however, I am unable to do so, although I recognize in it pathological conditions very similar to the disease so ably discussed in the AGE by DR. MORTON and others, some two years ago. I believe the disease has received no classification in standard works, its victims alluding to it, however, as "the scratches," "the mange," "Michigan itch," etc. It is quite prevalent throughout the state, my correspondence with a number of physicians showing it to be more common in the northern counties, and especially in lumber camps, where facilities for the spread of the contagion are numerous. It is not confined to the country, however, as my experience and that of various city practitioners prove its general distribution. The following describes the affection as far as my experience goes:

As a rule, there are no very apparent prodromata; some patients complain of fugitive pains in the limbs and joints, resembling rheumatism, accompanied by a slight elevation of temperature and some derangement of stomach and bowels, and, a few days previous to the eruption, yawning and stretching. From 24 to 36 hours after these manifestations the patient will have an eruption of minute solid elevations of the skin—papulæ—accompanied by an itching, which, as the disease advances, becomes almost intolerable. In the majority of cases the itching, or the eruption, is the first indication to the patient that anything is wrong. The eruption is quite minute and usually papular at first, although it may assume other forms and if not aborted eventually becomes vesicular in places, the acuminated elevation of the cuticle giving way to the orbicular which, with an accumulation of lymph clear and colorless, marks the vesicular stage. In this stage the severe itching is attended with considerable superficial heat and tingling of the part.

In some cases the local inflammation runs high, and the surrounding derma is of a bright scarlet color, with a feeling of tension in the part affected.

The itching and other symptoms are invariably worse at night or on going from a lower to a higher temperature, standing over a register or near a fire. The converse of this is true in many cases, as the rising from a warm bed frequently determines an exacerbation of the symptoms.

The eruption always occurs on a portion of the body covered with clothing, the hands and face, so far as I can discern, never being affected. It favors the arms, chest, abdomen and thighs, and is never general. Small sores sometimes result from scratching; they become covered, however, with a scab, which desquamates and all trouble in that immediate part is removed.

I do not look upon the disease as markedly contagious, but it is, beyond cavil, so to a certain extent, as eventually, unless the precaution of separate beds is observed its spread in families is inevitable.

Its etiology and an investigation of the cause or causes which predispose to its development is important, as upon these, to a great extent, hinge the treatment to be adopted for its prevention and cure, for, although it is not of serious menace to the life of the individual, its intolerable itching, burning, tension, and persistence in spite of treatment, renders it a matter of profound concern to both the patient and physician. Its differential diagnosis is somewhat difficult to one who is not a specialist, as in some peculiarities it resembles either scabies, prurigo, lichen or a syphiloderm. The absence of the acarus and diffusion of the disease, differentiate from scabies; the history of the case and an absolute failure of anti-syphilitic medication to remove or alleviate the symptoms removes the suspicion of syphilitic origin; if it were a local neurosis it would not be contagious, and if it were any variety of lichen, we should find transient papulæ, the affection extending to the arms and fingers (lichen agrius dorsi manus); would find it aggravated by heat; relieved by decreased temperature and non-contagious. It resembles prurigo somewhat, but prurigo is not contagious, its

* A paper read before the Detroit Medical and Library Association.

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papules are not small and acuminated, but large, elevated, flat and isolated.

While making no arbitrary assertions as to its ætiology, I am impressed with the opinion that it should be classed with the dermatophytæ or vegetable parasitic skin diseases. I have treated a number of cases during the past year, successfully; two, however, after six weeks' ineffectual treatment, fell into the hands of some other practitioner. The majority yield, however, to the antiseptic treatment.

Internal medication has proven in my hands quite barren of results, though many physicians in the northern counties report in favor of it. Dr. James Eakins, of Port Austin, reports good success with the following:

℞ Liq. pot. arsenit., gtt. ii.
Ferri cit., gr. ii.
Pot. iodid., gr. v.
Syr. glycyr.,
Aquæ, ää ℥ ss.
M. Sig.—At one dose three times a day.

He uses with this an external application of:

℞ Hyd. rub. ox., gr. x.
Adipis, ℥ i.
Sig.—Apply to parts affected.

I have found the following very serviceable:

℞ Hyd. bichlor., gr. iv.
Chloroformi, ʒ ss.
Glycerini, ℥.
Aquam rosam q. s. ad ℥ iv.
M. Sig.—Shake. Apply four or five times a day.

It is best to wash with the following before applying the above:

℞ Potas. caustic., gr. xv. to xxx.
Glycerini, ʒ j.
Aquæ, ℥ i.
M. Sig.—Add water sufficient to suit exigencies.

As an ointment the following is excellent:

℞ Menthol., ʒ ss.
Acid. carbolic., gtt. xxiv.
Olei rosæ, gtt. ii.
Adipis, ℥ ss.
Lanolin, ℥ iiss.
M. Sig.—Apply three times a day.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated meeting, April 19, 1886.

The president, E. J. Doering, M. D., in the chair.

Dr. H. Gradle read a paper on

PURE DRINKING WATER.

He said the only way of deciding the question whether the Chicago drinking water is ever deleterious to health is to search for the number and kinds of micro-organisms it contains. The sewerage is poured into Lake Michigan, the source of water supply, whenever the current in the river drifts towards the lake. It is well known that the discharges of typhoid fever—of which there are over 5,000 cases annually in the city—contain the typhoid bacilli. any spores existing in them, and thus carried into the lake, are likely to remain alive in the water long enough for some few of them to enter the water mains. A similar danger is not unlikely in the case of other intestinal diseases, although the parasites causing them have not yet been identified. Such considerations lead one to suspect the water as the possible cause of infection, however rare.

The speaker has made some culture analyses according to the methods of Koch, and found from 1,000 to 1,500 living germs per cubic centimetre of water. Four to six varieties of bacilli are commonly met with in the water, mostly in the form of spores.

For purification the speaker recommended 20 minutes boiling, or thorough filtration. Most filters in the market are insufficient. The Mallié aerifilter, however, was found to be practically bacteria-tight, when recently cleansed, though on continued use a few germs pass through it. It consists of a cylinder of porous clay screwed to the faucet, and surrounded by a glass cup, through which the water passes.

Dr. Long asked if it is demonstrated whether the bacteria in our drinking water comes from the sewerage or from the air.

Dr. L. Curtis said there was no doubt that water absorbs a great number of bacteria from the air, and that these may gain entrance into the circulation through the digestive tract as well as through the respiratory tract. He said there is no doubt of malarial germs being introduced into the system by means of drinking water.

Dr. R. Tilley wished to know if it has been actually demonstrated that the bacillus tuberculosis finds its way through our sewers into the lake and drinking water. We are not justified in saying that our water contains this element of danger until it has been demonstrated.

Dr. J. Zeisler asked if Dr. Gradle had examined the Waukesha waters and found bacteria in them.

Dr. Gradle closed the discussion by saying he took pains not to state in his paper whether he thought the diseased germs found in the water were introduced by means of the sewerage or air. It is not a vital point so far as the use of the water is concerned, although if it is decided that these bacteria are introduced by means of the sewerage and not the atmosphere, it would have a bearing on the question of

where to dispose of our sewerage. However, there is no doubt that bacteria are introduced into large bodies of water by means of dust, vegetation, and decayed leaves, and there is no reason to believe that the bacteria found in our water is derived from the sewage alone. A Russian chemist had examined the water found at St. Petersburg, and found that at a distance from the city the number of bacteria per cubic centimeter was considerably less than near the the city. DR. GRADLE has examined water obtained from Lake Michigan about 35 miles from Chicago and had found about the same number of bacteria per centimetre, but a less number of varieties than in city water. He believed the spores of typhoid and tuberculosis may find entrance into our lake water and become causes of disease in individuals who are not prepared to resist their attack. DR. GRADLE had never examined the Waukesha waters, but he had examined water from a spring on his own farm, which he believed to be as pure as Waukesha water, and had found only 15 to 20 bacteria per drop, and only three varieties. He believed that spring waters are the purest, as the bacteria they contain cannot be due to sewerage.

DR. W. H. BYFORD read a report of a case of

SCLERODERMA.

A girl, æt. 10 years, apparently healthy and of good family history. Five years ago she received a shock from a lightning stroke. Shortly afterwards her parents noticed under the surface of the skin over the outer region of the left forearm, a delicately traced symmetrical figure, branching and ramifying in purplish colored lines with singularity. DR. BYFORD believed the lightning had paralyzed the cutaneous branches of the musculo-spiral nerve, and caused congestion of these filaments, with the marking as a result. In due course of time the skin has undergone the changes that take place in scleroderma. There is hyperæsthesia accompanied by pain, especially at night. The patch is also now slightly elevated above the surrounding healthy integument, and is only slightly movable, while at the elbow it is attached to the fascia and sheaths on the tendons, thus interfering somewhat with the movements of the forearm.

DR. J. JEISLER said he had seen four cases of scleroderma, two of general scleroderma and two of partial scleroderma. The first two cases he saw in a clinic of Kaposi. Their appearance was striking. In scleroderma the features of the face are immobile, and therefore the patient cannot express the emotions. The skin and underlying tissues seem to grow together. The cases of partial scleroderma he had seen in this city. In one patient the patch of scleroderma was a ribbon-like band behind one ear, pinkish in color, immovable upon the underlying tissues. The other case was a lady æt. 50 years, who noticed her right mammary gland was becoming hard, large, and the nipple contracted. There was no pain in the breast nor were the axillary glands involved. The skin was hard and adherent to the underlying tissue. A similar condition was observed in a patch of skin on the right arm. KAPOSI states the majority of cases of scleroderma occur in females. The best treatment for scleroderma is massage and galvanic electricity.

DR. H. GRADLE presented some stereoscopic views of sections of hypertrophied tonsils taken from TROUTMAN'S book on "Hypertrophied Tonsils," after which the Society adjourned.

MULTIPLE UTERINE FIBROIDS. THEIR REMOVAL BY THE INTERNAL ADMINISTRATION OF ERGOTIN.

BY J. A. WESSINGER, M. D., HOWELL, MICH.

The subject of this article is a colored woman, 28 years old, mother of five healthy children, the oldest being twelve, and the youngest two years old. Patient has been engaged in menial work during most of her life. Had been quite healthy until about five years since, when she began to suffer from irregular, painful, and profuse menstruation. During the menstrual period there were also present quite severe bearing-down pains. The patient first consulted me March 6th, 1882. Upon examination, found an intra-uterine pendulous tumor. Patient consenting to its removal, I accordingly brought away, by means of the wire ecraseur, a uterine fibrous polypi about as large as an almond. The patient made a rapid recovery, and I saw nothing more of her until the 30th of last January, when patient again presented herself with about the same train of symptoms as narrated above. On examination, by means of the uterine sound, found an obstructing mass at the internal cervical neck. This growth was so firmly impingent at this point that I ceased all further examination. Bimanual method found uterus enlarged, and of a rather irregular outline. Also found right ovarian tenderness, numerous infiltrated nodules in both mammæ, evidences of tabes mesenterica, appetite poor, headache, and bowels constipated. Patient presenting a general anæmic appearance. Being quite well satisfied of the presence of an intra-uterine growth, I decided on the internal administration of ergotin, in the treatment of the case. The patient is suffering from a cardiac lesion, which rendered her unfit for the administration of an anæsthetic. I accordingly gave her three grains of ergotin in pill form every hour, until the physiological action of the drug was established. By the physiological action of the drug I do not refer merely to its effect on the

unstriped muscular fibre, but also to the frontal headache, dimness of vision, and giddiness. On the appearance of these phenomena, I ceased the administration of the ergotin. A few minutes after which, or about seven hours from the time the drug was first given, a severe uterine contraction took place, which brought away a trio of uterine fibroids, the largest being about the size of an ordinary base ball, another about as large as a hen's egg, and the smallest about the size of an almond.

The growths are at present all well preserved and in my possession. The largest of these tumors was attached by a broad base, the others were pedunculated. The patient made a rapid recovery, and at the present writing she seems to be enjoying good health. However, should she be permitted to live a few years longer, I have no doubt that another treatment for uterine fibroids will be necessary in her case. The condition of the mesentery and mammary glands is an interesting feature in the case. In cases of chronic uterine inflammation we quite often see several lobular indurations in the substance of the breasts; these, however, are not new formations. They usually gradually diminish, and never become cancerous. The old adage, that "one swallow does not make summer," is quite true, and we are not warranted in formulating rules of general application from the treatment of a single case, yet I am satisfied that, in this case at least, the treatment was just as thorough and efficient as it would have been had we resorted to anæsthesia and an ecraseur. I am aware that EMMET, THOMAS, HEWITT, and many other of the great masters in the science and art of gynæcology, advise against the use of ergot in the treatment of these cases; but, with all honor to our teachers, I must say that their instruction is not infallible, and some of us at least venture into the "by and forbidden paths" of treatment and come out with success crowning the effort.

HYSTERIA AND ITS RELATION TO DISEASES OF THE UTERINE APPENDAGES.*

BY S. C. GORDON, M. D., PORTLAND, ME.†

MR. PRESIDENT AND FELLOWS OF THE AMERICAN MEDICAL ASSOCIATION: The year that has just passed has given no remarkable discoveries either in obstetrics or gynecology, and, therefore, in attempting to comply with the rule requiring the chairman of each Section to present a résumé of new things in his department, I can only emphasize some of the matters that have been alluded to, perhaps in some former addresses, and weigh the experiences of individual members of the profession on some of the topics that have been more or less discussed. Time, which alone can give experience, makes sad havoc with many of our pet theories, however plausible they may seem when first advanced. We are constantly exploding some of the well-accepted doctrines of the old teachers in every department of medicine, and in none more than in these two branches of the science. A familiar example of this occurred at the last meeting of this Association. I think no one theory held stronger place among us than that an accoucheur, after exposure to septic influences, should for a long time refrain from attendance upon new cases. A neglect of this rule was generally deemed criminal, and the penalty was visited upon the victim in the most severe and summary manner.

The carefully prepared and exhaustive paper of DR. GEORGE F. FRENCH, who collected opinions from the ablest men in the profession, from this country and Europe, together with his own critical experiments, shows us that by proper measures and strict, absolute cleanliness, we can safely continue the daily routine of obstetrical work, with no months of delay, or anxiety as to the results of such continuance. The criminality now lies in the neglect of the proper precautions within the reach of every practitioner. Time alone may not be sufficient —in fact, may be no element of safety, if all the other elements are omitted. If the seed sown by that one paper has been properly cultivated and has borne the same kind of fruit, the harvest within the year just passed must be abundant.

I will not attempt to review the literature of obstetrics for the past year, so far as relates to new discoveries or new methods of treatment of the parturient woman, but simply allude to some of the practical points which have been more or less *sub judice* for many years. Among the many of these questions, the early signs of pregnancy may be mentioned. I have several times within the past year applied the test recommended by HEGAR and alluded to in several journals, viz.: the increase in the anterior curvature of the uterus, with increased elasticity of the walls. I think it a valuable sign and one that is apparent early. For obstinate vomiting of pregnancy, I believe no one measure has been found of such value as forcible dilatation of the cervical canal below the internal os, and lifting the uterus out of the pelvis and supporting by cotton packs or some form of pessary. The cases requiring the induction of abortion for this very distressing symptom will, I think, be very few if these measures are faithfully and carefully carried out. The induction of premature labor for deformity of pelvis or disproportionate head, as found by former pregnancies, is, I believe, fast finding favor with accoucheurs. From my own

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experience (very limited) I prefer the employment of the bougie, retained until labor begins, although some practitioners whose opinion I value, prefer the rapid manual dilatation. Where we fear a disproportionate head, I think the eighth month the best month for it, when a tolerable degree of certainty exists as to the period of conception.

The post-parturient management of the woman I think deserves much more consideration than it has formerly received. I am sure that until within a comparatively short period authorities have been disposed to teach a much more rigid system of dietetics for the woman who has just passed through her labor than the absolute necessities of the case require. I I believe the "poor sloppy diet" of the lying-in room has been a fruitful source of the "lingering delay" and complications of childbed. Many a woman whose period of gestation has compelled her to forego all the pleasures of the table finds the demands of nature such that the most nutritious food is desired. In my opinion we will find much benefit from a liberal construction of the rule that nature does not make mistakes often.

A word or two in regard to ameliorating the sufferings and shortening the process of labor. It seems that an unnecessary amount of suffering, both in degree and duration, attends the "normal labor" (so called) among the large majority of American women—they do not, as a rule, bear children so easily as the women of the British Isles. I am very well convinced—not only from statistics, but from the general sentiment so prevalent among British practitioners that a forceps delivery is rarely required. While it is not pertinent on this occasion to elaborate this very much—statistics being accessible and more or less familiar to all of you, I cannot but believe that the use of anæsthetics and the forceps, in labor, has done much to relieve the suffering and prevent many of the injuries formerly incident to the parturient process. I believe that vesico-vaginal fistulæ are becoming less frequent under the more careful and judicious use of the obstetric forceps, by means of which a long and tedious labor has been shortened, and the pressure has been removed from portions of the vagina that would otherwise have lost vitality and sloughed.

The treatment of the placenta, both at normal labor and at abortion, has been the cause of much discussion for the past few years. The views of PAJOT, recently published, are so nearly in accord with my own experience and practice, that I cannot forbear alluding to them. He believes that, as a rule, the full term placenta is best delivered by prompt and gentle traction upon the cord, with the left hand, while the right index finger passed up along the cord intelligently regulates the amount of force necessary to be used. The earlier after the delivery of the child this is done, the more easily is it completed and less evil results follow.

I believe also, with him, that the forcible removal of the secundines in abortions, at almost any cost (now so prevalent), is by no means the safer practice. Remove them if it can be done without much trouble, or instrumental interference, but otherwise a careful tamponing and close watching will do less harm, save more lives and prevent a vast amount of future suffering.

In passing to the subject of gynecology I propose to occupy your time principally with one theme, that has engaged the attention of the profession and provoked much discussion during the past year, viz.: the removal of the uterine appendages—familiarly and variously characterized as BATTEY'S, TAIT'S and HEGAR'S operation.

I am sure any practical work done in this direction will be regarded as testimony before a jury of the profession, and a basis for making a proper decision upon the merits or demerits of the operation. The mere dictum of any one man or set of men amounts to but little in our profession. Nothing is conclusive or convincing short of absolute experiment. When a man, however distinguished he may be, says that he has never seen any case where, in his opinion, the operation was required, such opinion amounts to but little in comparison with another who has believed it was required, and demonstrated by the operation a well-marked pathological condition, and cured his patient, who has suffered for years.

The profession has differed very widely as regards the indications for this surgical interference, some claiming that only by a "demonstration by touch" which shall determine absolute organic changes in the ovaries and tubes, should a diagnosis of disease be made. On the other hand, others become satisfied of the existence of structural changes by certain manifestations, which we term functional disturbances, and are commonly called by the terms reflex and hysterical. That a large class of cases exist in every community, that have been invalids for years, and have defied all methods of treatment, is a well-known fact. It is largely to this class that I call your attention, and shall therefore devote the remaining portion of the time allotted to me to the discussion of

HYSTERIA AND ITS RELATION TO DISEASES OF THE UTERINE APPENDAGES.

I suppose it is equally true of medicine as of everything else, that there is really "nothing new under the sun"—therefore we may as well select, as one of the topics for consideration, a well-worn subject for an essay on any medical occasion. Certainly nothing has been talked about or written upon more than hysteria.

Even the laity are as familiar with the symptoms, pathology and treatment, as the (I might almost say) majority of the profession. No literature of the profession in any age is complete, that does not embrace more or less learned discussions upon this ever fruitful subject.

No one man from his own experience is able to fully represent in language the various and ever-changing symptoms of this bane of his profession. I am well aware that in presenting this subject before you a smile of derision may almost unconsciously come, and a degree of surprise be manifest at the presumption of one who would attempt to evolve anything that might be new or interesting out of such a threadbare theme. And yet, when we find one of the modern writers on nervous diseases making the confession that "hysteria contributes absolutely nothing to the science of morbid anatomy," we are fully justified in advancing any theory that has a semblance of reason, especially if we can present any evidence that in the remotest degree will appear to sustain that theory. The absolute in our profession may be very limited, but the probable is almost indefinite. The sum total of medical science and knowledge rests upon the basis of this limited absolute and indefinite probable, the former having for its foundation principally anatomy and physiology, while the latter has the accumulated experiences, and observations, and experiments of thousands of educated students, through thousands of years. To the mass of the practical minds of these students the latter is as valuable as the former. When we find, after a series of experiments, that a constant result is reached by a continued course, we must finally admit that there is a relation of cause and effect. By countless multitudes of practitioners it has been found that opium is the antidote for pain, that quinine is antipyretic and that chloroform is anæsthetic. These and many other now well-accepted facts in the profession came to us, not by any inductive reasoning, but by the more common mode of experiment and close observation. Applying the latter method, together with what has come to us through the well-known principles of physiology, to the disease known as hysteria, I believe we can at least make some little progress towards "contributing *something* to the science of morbid anatomy."

At the risk of being prosaic I must briefly allude to some of the more prominent symptoms of this classified disease. I am quite sure I shall not challenge very much discussion on this point, even if I incorporate into my description nearly every symptom of human suffering known to medical science. Their name is legion; I will use those necessary for the several illustrations. Sydenham thus describes the multiform manifestations of hysteria: "A day would scarcely suffice to reckon up all the symptoms of hysterical diseases; so various are they and so contrary to one another, that PROTEUS had no more shapes, nor the chameleon so great a variety of colors, and I think DEMOCRITUS was pretty right (though he mistook the cause of the disease) when he wrote in an epistle to HIPPOCRATES, that the womb was the cause of six hundred miseries, and of innumerable calamities. Nor are they only so very various, but also irregular, that they cannot be contained under any uniform type, which is usual in other diseases, for they are, as it were, a disorderly heap of phenomena, so that it is very hard to write the history of the disease." His only explanation of the fact that women have the disease so much more frequently than men, is that "kindly nature has bestowed on the former a more delicate and fine habit of body, having designed them for an easy life, and to perform the tender offices of love." His "confusion of spirits," too many of them "collected in a crowd," and that the "ataxy of the spirits has vitiated the humors," seem hardly a sufficiently lucid explanation of the etiology of the disease, in these modern days of exacting pathology, and yet it was nearly if not quite as satisfactory as any of the many theories of our later pathologists: "It is nothing but an attack of hysterics;" "she is only nervous;" "let her alone and she will come out of it all right;" "isn't this hysterical largely?" "surely there cannot be any organic lesion," etc.

Perhaps no better modern history of hysteria has been written than that of HAMMOND in his "Diseases of the Nervous System." In the first paragraph under the head of symptoms he says: "The phenomena of hysteria may be manifested as regards the mind, sensibility, motility and visceral action, separately or in any possible combination. Thus it is not uncommon to meet with cases in which the only evidence of the disease is seen in abnormal mental action; others are characterized solely by derangements af sensibility, such as hyperæsthesia or anæsthesia; others by aberrations of the faculty of motion, such as paralysis, spasms and contractions. Again, all these categories may be witnessed in the same person, giving rise, among other phenomena, to coma and convulsions, and again, some one or more of the viscera may be deranged in their functions, and thus the appearance of organic disease be simulated."

These mental symptoms are so very various that any attempt to recite them would be a history of the whole class of mental diseases, from the slightest emotional disturbances to the most violent exhibitions of grief, entirely disproportionate to the cause, to be followed, perhaps, by the utmost indifference to all surrounding influences. That the will to a great

extent loses its power, at times, no one familiar with these cases can for a moment doubt, although under the influence of some strong exciting cause, the patient suddenly acquires the lost volitional power. Illusions and hallucinations of all kinds and degree occur in many of these cases, and we find most striking illustrations of the most complete aberrations of the special senses. "Images are seen where there is nothing, voices are heard where there is absolute silence, odors are smelt where there is nothing to smell, and strange tastes are perceived where the mouth is empty." The vagaries of the intellect are not less strange than of the special senses. The perceptive faculties are often most wonderfully sharpened, while the reasoning prowers and volubility are remarkably increased. As often we find the most brilliant intellects dulled and the conversational powers almost entirely wanting. The principal points of difference between this and insanity seem to be the less duration of the phenomena and less power to influence the patient's actions.

In the deranged sensibility we find all degrees of hyperæsthesia and anæsthesia, the most common seat being the skin, in the region of the mammary glands, face, throat, extremities, and especially about the head in the form of headache. HAMMOND quotes BRIGUET as saying that "out of 356 hysterical patients 300 were constantly subject to headache." Neuralgia in all its manifestations, in all parts of the body, may thus exist, without our being able to give it a definite origin. Anæsthesia, with a corresponding loss of feeling in all these parts of the body, may thus exist, without our being able to give it a definite origin. Anæsthesia, with a corresponding loss of feeling in all these parts of the body, may exist, and even the special senses be affected to the point of producing blindness, deafness, loss of taste and smell. I have seen some remarkable cases of blindness due to reflex disturbances of the genital organs, which were at once relieved by appropriate treatment of these lesions.

Hysterical paralysis, as manifested in hemiplegia, paraplegia, or, much more limited than either, aphonia spasms, tonic and clonic, may affect almost every muscle in the body, continuing a long time, and simulating organic lesions in muscles, joints and mucous membranes.

The functional actions of the viscera are by far the most surprising manifestations of hysteria, and frequently the most persistent and distressing. Of all these perhaps there is no one more commonly affected than the stomach. HAMMOND says this seems to be the "favorite organ," and this is in accord with my own experience. The most obstinate vomiting, persistent flatulency and all the various distressing symptoms of indigestion, characterize a majority of the cases under my own observation. The disturbances of function of other organs, like the heart, lungs, intestines, kidneys (with their inordinate secretion of limpid urine, the bladder with retention and incontinence of urine, the obstinate constipation of the bowels, are all familiar to every practitioner. The various forms of convulsions, attended with more or less loss of consciousness, bearing oftentimes a strong resemblance to epilepsy or tetanus, chorea or catalepsy, but distinguished from them by lack of consistency and constitutional disturbance, become the more distressing to witness and the most exhausting in their effects upon the nervous system.

The functions of the uterus suffer in every conceivable manner, from complete cessation of the menstrual flow for months at a time, alternating with the most frequent hæmorrhages, either very scanty (lasting but a few hours), or the most alarming in quantity. The pain and general nervous symptoms, as a rule, are most marked previous to the flow, oftentimes for many days, and they are so severe as to indicate with certainty the approach of the period even if the patient had no other definite means of knowing it. I think this an important diagnostic element. More rarely we find the exhaustion consequent upon the excessive hæmorrhages produces the well known physical convulsions, so familiar to every practitioner. The week preceding and following the flow (including it) is the time during which we may expect, and in fact find the most of these nervous phenomena. In many cases the remainder of the month may be comparatively free from any suffering whatever, especially in early life. As age advances, however, the periodical suffering leaves its impress upon the entire system. Not infrequently we find, as a result of the long continued nervous symptoms, marked changes in the facial expression, and a dull, listless melancholy rests upon a countenance once bright, animated and cheerful. The skin suffers especially, in many instances. Eruptions of various kinds, especially acne, appear, often to a degree that is disfiguring and loathsome to the patient. Alternations of color occur, so that in a few hours we find the most ghastly pallor, followed by a deep mahogany color, which may and in many instances does continue for several hours. In several cases under my own observation this latter symptom has been very marked, so that I now look upon it as a prominent diagnostic feature.

But enough has been said on the symptoms, and we pass to the etiology. Having already given you SYDENHAM'S views on this point, I will add that of a more modern author and then give you some cases from my own experience, and there leave the subject.

All authorities agree upon one predisposing cause, as by far the most important—so im-

portant and predominating that, in my opinion, it becomes very highly significant, viz.: sex. Until within a comparatively short time hysteria in the male was not even talked or written about, and even accepting all that we know of the reported ceses, they are trivial in character by comparison. Men have a nervous system, and it would be wonderfully strange if we did not sometimes find manifestations of disease that would closely correspond with one or more of the multiform phases of what we have just described. HAMMOND says that in "332 cases observed by him in six years, 329 were females." Now it is not the object of this paper to attempt to enter into all the causes that have produced and may continue to produce hysteria in the female. The causes may be as various as the symptoms or the cases—I do not deny any cause that may seem to be well established by any mode of reasoning, whether derived from theory or practice. I simply propose to give you some instances derived from my own experience, selecting such cases, from quit a large number treated, as will illustrate a variety of symptoms, and results obtained by the methods employed.

[Here follow reports of six cases in which the removal of the ovaries was attended by cessation of all the symptoms which presented.]

I have not time, even had I the courage, to trespass on your patience to report any more cases. I have now made the operation twenty-five times, and each case has a certain amount of professional interest. Four or five have been made for uterine fibroids, mostly for excessive hæmorrhage, with complete relief to the hæmorrhage. One case the removal was made hoping it might stop the growth of a fibroid and relieve the suffering due to the pressure. There has been no relief, however. I think cases like this should have hysterectomy. The cases reported were selected as types of the various phases of hysteria. Among the cases not reported are types of the same phases, and with as good results.

In only one instance I was unable to remove the entire substance of the ovary and tube, and this is the only instance of continued menstruation. She suffers very much at these periods, and I think I shall make another trial to finish it. In no case have I failed to find well-marked disease of the appendages, either strong evidences of former attacks of oöphoritis, as indicated by exudate and other organic changes in the substance of the ovary, or enlargement and stenosis of the fallopian tube. In not more than four instances have I been able to make a diagnosis by the touch, but have in all others operated entirely for the relief of the hysterical symptoms. With the single exception named, in every case great relief has followed, and with two exceptions, I have no reasonable doubt that a complete cure will result after a reasonable length of time. We cannot expect that a nervous system that has suffered for years will at once resume its normal functions. The wound is tender after the thorn has been removed. Effects do not immediately cease on removal of the cause; women suffer more or less from some disorders of the nervous system at the natural menopause; similar symptoms naturally follow an artificial one.

I do not by any means claim that all hysterical symptoms are due to diseased uterine appendages; but I am sure, from this experience, that in these cases they stand in the relation of cause and effect. I know that in a very large majority of these cases these women have been suffering invalids for years, and that all modes of treatment have been of no avail. From being burdens to themselves, and dependent upon their friends for help, they are now comfortable and independent. Through long suffering and in many instances from lack of sympathy for their suffering, life has lost its charm and they would gladly have rid themselves of it, while now they are glad to take their places as useful members of society.

I have never operated in any case where I have not been well satisfied, either from my own care of the case, or from that of intelligent physicians, that further treatment in any other manner would be of no avail. I have no regrets at the course pursued up to the present time, and I know of no case where the patient regrets the step she took.

In answer to the objection that it unsexes the woman, I have only to say that in all the married women, they either have never been pregnant, or have not since the beginning of their most serious symptoms, even though several years have elapsed since their last childbirth.

DR. W. GILL WYLIE, professor of gynæcology in the New York Polyclinic, in reporting thirty-seven operations for removal of the uterine appendages, in the Medical News of March 27, 1886, says: "I have yet to see a well-marked case of hystero-epilepsy or decided hysteria operated upon, in which the ovaries were not found in a state of cystic degeneration or very much atrophied. And these are nearly always associated with an imperfectly developed or atrophied uterus." And in the same paper he says, what I have found true in several cases, "that in those cases where the subjective symptoms were chiefly reflex and of a nervous order, the *immediate* results were by no means always satisfactory, although many recovered after being seemingly unimproved for several months."

When we take into account how little has formerly been done in these long-standing reproaches to the profession, we can certainly get much comfort from the result in his cases. On this point he says: "It is yet too soon to speak

positively about the results of the operation in all classes of cases, but I can say without hesitation that in those cases where the subjective symptoms were actual local pain and physical inability to go about without causing persistent pain—and almost all the cases of pyo-salpinx would come under this head—the results were good and satisfactory to the patient and physician. In many cases the relief from pain was gratefully acknowledged at once."

This is so thoroughly in accord with my own experience that I need only to quote it as applicable in a majority of my own cases. The experience of BATTEY and TAIT, who are deservedly the pioneers in this department of gynæcology, is now so well known to the profession, that it would be supererogation at this time to allude to it in detail. It is no longer a question with them what shall be done with this large class of sufferers; by hundreds of cases they have demonstrated the utility of the procedure.

The very extensive and valuable papers relating to this and kindred subjects, by MARY PUTNAM JACOBY, show that what at first glance may seem to be only slight changes in the ovary and tubes, are really severe structural organic changes, that without doubt have destroyed their function.

If I were asked to formulate my views, derived from my own experience and that of the men who have done much more in this direction, I should sum up about as follows:

1. That these (so-called) hysterical symptoms occur almost exclusively in women. That whenever any of them do occur in men they are much less in degree, even if they do not differ in kind.

2. That it is fair to presume from the first proposition that it is due to disease of some organ or organs peculiar to women.

3. That they are not due to disease of the uterus alone, for when all apparent abnormalities of the uterus are corrected, the symptoms, very often, are not in the least relieved.

4. That all modes of treatment, other than operation, have failed to cure, and in most instances have not ameliorated, the symptoms, even where the disease was believed to exist in the uterine appendages.

5. That the large majority of all cases operated upon have been entirely cured of the symptoms for which the operation was made, and the remnant have been relieved and are continuing to improve.

6. That it is impossible, in a majority of cases, to determine by the touch, diseases of these organs that will produce the symptoms alluded to.

7. That one can by these symptoms alone make a sufficiently satisfactory diagnosis to warrant the operation.

8. That after correction of all well known and clearly diagnosticated uterine troubles, these symptoms are not relieved, we are justified and required, for the cure of our patient, to recommend this remedy.

9. That the operation does not in any case destroy the sexual desire, or in any way unsex the woman, except so far as it may prevent further child-bearing.

10. That in a majority of cases requiring the operation the woman is already sterile.

11. That in my own experience the specimens removed have been found so changed by inflammatory action as to be cirrhotic, or otherwise destroyed, either by softening or cystic degeneration of both ovaries and tubes, with very frequent stenosis of the latter.

12. That a fatal result from the operation is extremely rare, if it is carefully performed and closely and intelligently managed as to the after-treatment. In the 25 cases operated upon there has been but one death.

It is certainly time that the profession were done with the old idea that a hysterical woman is only to be laughed at, and treated as one who deserves no consideration at our hands. Thousands of women, of the strongest character, have been cruelly and shamefully treated by their friends, even while they were suffering the most excruciating agony, and simply because the profession has given countenance to the theory that "she could prevent it if she chose," that she was "only hysterical." We cannot expect more from the laity than we teach them. Instead let us each strive to "contribute something to the science of pathological anatomy" out of this mass of distressing symptoms.

[FROM NORTHWESTERN LANCET.]

CHRONIC PROSTATITIS.

BY W. H. DANFORTH, M. D., BOSTON, MASS.*

Chronic prostatitis is, in the majority of cases, the result of gonorrhœa where the inflammation has passed the compressor urethræ or the prostate itself.

Next in frequency as causes come masturbation and excesses in venery, as these habits keep up a continual congestion in the prostatic region; but in this case the inflammation is chronic from the beginning, and usually the secretion is mucous and not purulent.

The disease may arise from stricture, unskillful instrumentation, irritating drugs, and, perhaps, from the passage of concretions and sand in the urine.

Probably the prostate itself is not always affected by the inflammation; for it is often found normal in size and not tender to the touch; this is most noticeably the case in the

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chronic cases arising from masturbation. For this reason it seems incorrect to apply the term "prostatitis" to every inflammation of the prostatic urethra. The inflammation probably always begins in the mucous membrane of the urethra, and may or may not extend into the follicles of the gland later.

DR. ULTZMANN considers the prostatic urethra as both theoretically and practically the "neck of the bladder." He says: "The fact that this portion really belongs to the bladder .....is evident from the fact that both the lateral limbs of the trigonum can be followed anatomically far into the prostate, and, moreover, the muscular layer of the prostate represents simply a prolongation of the muscular coat of the bladder. 'The neck of the bladder' has, however, a practical significance. The neck of the bladder, or the posterior part of the urethra, comprehends the portion between the internal sphincter and the external cut off muscle, the compressor urethræ. Now, the strength and resisting power of these two muscles are very unequal. While the external cut-off muscle forms a barrier to fluid pressing either toward the bladder from without, or from the bladder outward, which is only removed by the volition of the individual, we find that the inner sphincter yields to very slight pressure, and, therefore, offers but slight resistance either to the urine in the bladder pressing outward, or to secretion arising in the posterior urethra pressing its way backward. Thus the desire to urinate, as a rule, is caused by the pressure of the urine overcoming the resistance of the internal sphincter and getting into the 'neck of the bladder.' In the moment of the strongest desire to urinate, the neck of the bladder and the bladder itself form one common cavity, and the further escape of the urine is only hindered by the cut-off muscle (compressed urethræ), dependent on the action of the will."

If we adopt ULTZMANN'S view, we may apply the term "catarrh of the neck of the bladder" to all inflammations of the posterior part of the urethra, whether involving the prostate or urethra.

When an acute attack of prostatitis comes on during a gonorrhœa, it is announced by very frequent and painful micturition, weight and throbbing in the perineum, pain on defecation, and, perhaps, an act of retention. The symptoms of the chronic form, whether from an acute case or other cause, are as follows: (these will not all be seen in the same patient, usually.)

1. Increased frequency of micturition, but much less than in the acute form. ULTZMANN says: "Frequent micturition in disease of the posterior of the urethra is such a very characteristic symptom, that from the presence of this sign alone we can always conclude with certainty upon a lesion in the neck of the bladder."

2. "Bearing down" and uneasiness in the perineum and anus.

3. Slight pain or uneasiness at the end of micturition.

4. Tenderness around the prostate on passage of a sound. In long-standing cases the urethra becomes anæsthetic, and this symptom is lost.

5. Inability to urinate on making the attempt is a prominent symptom.

6. Diminution in the force of the stream and dribbling after micturition.

7. Reflex spasm of the compressor urethræ; this is of common occurrence.

8. Frequent erections and erotic desires, as well as frequent seminal emissions at night, are often complained of; but in cases of long duration the opposite extreme is found, and partial or complete impotence may be present, causing the utmost depression.

9. There may be a discharge of mucus from the urethra, showing the presence of inflammation anterior to the compressor urethræ; when, however, the inflammation is confined to the prostatic urethra, the secretion appears only in the urine. This, of course, is due to the strength of the compressor, keeping back secretion posterior to it.

10. Mucus may be discharged from the urethra during straining at stool, simulating the discharge in spermatorrhœa; the microscope settles this point.

11. When the urine is passed in two portions, characteristic appearances are seen. ULTZMANN says: "If only a little secretion has collected in the posterior urethra, the urine in the bladder remains uninfluenced, and if we have the patient urinate successively in two glasses, only the first portion of the urine passed will appear turbid, the second half remaining clear and transparent. If, however, the secretion in the posterior urethra is considerable in amount, it will flow back into the bladder, make the urine more or less turbid, and even irritate the bladder itself. In this case, both specimens of urine (passed in two glasses) will appear turbid. However, as a distinction from a primary cystitis, the first half of the urine will appear more turbid than the second, and will contain more compact flakes, which all come from the urethra, and which, accordingly, are absent from the second portion of urine passed."

12. These "flakes" are the so-called "prostatic shreds," and consist of short, thick, clumpy masses, which, under the microscope, are seen to be collections of pus, prostatic epithelium and mucus, with sometimes a few spermatozoa. They occupy the follicles of the prostate, and are washed out by the urine.

13. Shreds from the anterior urethra may

also sometimes be seen in the first portion of the urine; these are longer and thinner, and consist of pus and urethral epithelium.

14. The urine contains mucus, prostatic epithelium, pus, often spermatozoa, and sometimes blood corpuscles. A trace of albumen is often seen, which disappears when a cure is affected.

15. On rectal examination, the prostate is usually found somewhat enlarged and tender; it may be normal in size and not tender, in which case the inflammation is probably mostly in the mucous membrane of the urethra. (With enlargement of the gland there may be residual urine.)

In long-standing cases the prostate may be found atrophied, or losses of substance or cicatricial contraction from old suppuration may be detected.

16. Neuralgic pains in the back and groin are frequent subjective symptoms. Dr. F. S. Watson says: "These pains vary as to constancy and duration, and may be entirely absent." In regard to other general symptoms, he says: "The patients are often hysterical; there is decided reflex irritability; they are easily alarmed and start at slight noises, or unexpected sights; the nervous system is unstable, they are emotional and volition is diminished. Changes in disposition are marked; the patients become morose, despondent, anxious and worried, or apathetic and unable to work or fix the attention. The appearance of the individual varies greatly; as a rule they wear a careworn, listless or anxious look."

The frequency of micturition, with pain, and blood appearing at the end of the act, may simulate the symptoms of stone in the bladder. This happens only in the more acute cases, and rectal examination and sounding make the diagnosis clear.

True hypertrophy of the prostate occurs only after the fiftieth year, and can hardly be mistaken for an inflammation.

In cystitis the pain is felt above the symphysis pubis instead of in the perineum; the urine is generally alkaline, and the second part of the urine is as turbid as the first. Cystitis is, however, often associated with a chronic catarrh of the neck of the bladdler.

The treatment should be both general and local. The patient should take no alcohol; he should sleep on a hard mattress in a cool room; he should take moderate exercise daily out of doors; his bowels should be kept open and he should be given tonics and plenty of nourishing food. In other words, he should be kept in as good condition as possible. The urine must be kept dilute and unirritating by diuretics. For this purpose benzoate of soda, twenty grains given four times a day, is an excellent remedy. Locally, counter-irritation to the perineum is beneficial. One side of the raphe is to be painted with cantharidal collodion or tincture of iodine, and in a few days the other side. This may be kept up for some time, and will usually relieve the sense of weight and uneasiness. (Care must be taken to prevent the irritant from touching the anus.)

Together with this the prostatic injection of nitrate of silver is probably the best remedy. It is best to begin with a solution of two grains to the ounce, and increase to five grains. In making the injection it is well to pass a good-sized sound first, in order to stretch the urethra so that the fluid may readily penetrate to all parts. (The sound should be lubricated with glycerine, as oil will form a coating over the urethra and modify the effect of the application.) Then a drachm of the warmed solution is to be injected slowly, the point of the syringe having been located at the prostatic urethra by the finger in the rectum. Ultzmann's syringe catheter, fenestrated on the sides, connected by a rubber tube to a small syringe, is the most convenient instrument to use. The application should be made twice a week, using no more than a five-grain solution, and the treatment kept up for six or eight weeks. If, in that time, no improvement is noticed, the injections should be discontinued for a time and other means employed.

Combined with the deep injections and counter-irritation, large sounds should be passed once or twice a week. In the large majority of chronic cases the above treatment will bring about good results. It is particularly applicable to the chronic "masturbation cases."

A case which is not eminently chronic is, however, often made worse by the passage of sounds and by injections of the stronger astringents; in these sub-acute cases it is well to pave the way by the use of milder astringent washes, such as ten grains of boracic acid to the ounce, or twice a week till the nitrate of silver can be tolerated. In any case, the surgeon should find by experiment the "individual constitution," if such an expression may be used, of the urethra to be treated.

Cases of long standing are often extremely discouraging to the surgeon, as well as to the patient, and require a great deal of care and patience to treat successfully. It is often necessary to give a guarded prognosis. Those chronic cases arising from masturbation are particularly hard to treat, partly on account of the difficulty in removing the cause.

Dr. W. G. Watford (British Medical Journal) insists, after an extended trial of the drug, on the efficacy of arsenic as a prophylactic of scarlatina. The failure of belladonna in the same direction, will not prevent the putting of this new claim to the test.

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Editorial.

HEADACHE AND DIET.

The unsatisfactory result of medication in the treatment of migraine renders acceptable any suggestions founded on observations of other means employed for the relief of this distressing affection. In a paper in the London Practitioner, DR. A. HAIG enunciates a theory that this form of headache is dependent on causes to which gout is due, and among which a highly nitrogenous diet is chief, or, in other words, that it is due to an excess of uric acid. His reasons for this opinion are founded on (1) the clinical relationship of migraine and gout, which has been recognized by several authorities, and, notably by TROUSSEAU; (2) the therapeutic argument based on the remarkable way in which this headache, like other manifestations of gout, is kept in check by a diet poor in nitrogen, or is cured by calomel or salicylic acid, iodide of potassium, or even colchicum; (3) other signs of gout to be found in the family or personal history.

MR. JONATHAN HUTCHINSON has recognized the relation of certain diseases of the eye to gout. Besides the "hot eye" and "irritable eye," which he recognizes as species of gout, he speaks of "quiet gout," as distinct from acute paroxysmal gout, and as occurring in families in which a member may be afflicted with the latter variety. DR. HAIG is inclined to the belief that megrim, or migraine, is a manifestation of this "quiet" variety.

TROUSSEAU, after relating a case in which periodic headache was replaced by manifest gout, says: "So evidently is it" (migraine) "in many cases a manifestation of the gouty diathesis, that articular gout and migraine are observed in the same person, the one subsiding on the approach of the other; and it is often also the only expression of the hereditary tendency in subjects who are the children of decidedly gouty parents," and in accordance with this he used to give colchicum for the relief of gouty megrim.

DR. LATHAM, on this headache, argues that it is due to functional disturbance of the sympathetic vaso-motor system in the brain, from irritation of that system by gastric or other derangement. DR. MURCHISON, in "Headache of Hepatic Derangement," says: "But while fully admitting that megrim is in no way connected with retained bile, I agree with those authors who believe that certain cases of megrim are toxic in their origin, being symptomatic of gout and some other disorders." And further on he says: "In this way, then, megrim may sometimes be traced to hepatic derangement, this derangement consisting, not in retention of bile, but in that condition of the liver which we have found to produce lithæmia, and often to lead to gout; and in accordance with this view I have often noticed that megrim has been produced by particular articles of diet and relieved by mercury, podophyllin, and other remedies which unload the liver."

DR. HUGHLINGS JACKSON has been struck by the intimate relation there seems to be between chorea, migraine, and rheumatism, that there is often a history of rheumatic fever in the families of megrim sufferers, and that as regards chorea, of 75 cases inquired into, 53 suffered from paroxysmal headache, 31 of them having nausea and vomiting with them.

Then again in his address on the question: "Why Does Salicylic Acid Cure Rheumatism," DR. P. W. LATHAM shows by close chemical and physiological reasoning, that rheumatism and gout and a form of diabetes are probably due to errors of metabolism in the liver or the muscles, resulting in the excessive formation of uric acid among other things; and he explains in a very simple manner why, in the case of gout, certain purges may be of use by removing bile and with it the antecedents of uric acid from the alimentary canal; why benzoic and salicylic acids may prevent the formation of uric acid; and why iod. pot. may be of use in destroying uric acid that has already been formed. And as to diet he says: "The gout would be prevented by a diet largely farinaceous, and by eliminating the glycocine from the system, and by giving as little nitrogenous food as possible," this being the very diet which has long been known to reduce the frequency and severity of attacks of megrim.

Then again causes such as mental effort, worry, anxiety and other depressing influence, as over-fatigue, exposure, sexual or other excesses, said to precipitate attacks of gout, often bear the same relation to megrim; and many symptoms said to be premonitory of gout may also precede or accompany the onset of megrim, as gastro-intestinal disturbance, giddiness, irritability, impaired mental vigor, low spirits, restless sleep, unpleasant dreams, numbness, or tingling in the limbs.

That women suffer from megrim more than men is partly due to their more sedentary mode

of life; active exercise in megrim, as in gout, being both curative and preventive. And, again, the general disturbances which accompany menstruation are of a depressing nature and would be expected to act, as it appears they do act, in predisposing to attacks, and in these cases the attack is much less frequent after the menopause.

The action of drugs in megrim and gout is remarkably similar. TROUSSEAU and others have used colchicum with benefit in megrim, and other observers have remarked on the similar curative effects that certain purgatives, as calomel, have in both gout and megrim; and, again, others have used iod. pot. with considerable success, but the great value of salicylate of sodium in some of these headaches is more remarkable still; it seems to me to be most certainly curative and not merely palliative, as it removes the concomitant gastro-intestinal troubles along with the headache. Thus a dose of brom. pot. and sp. ammon. aromat. will sometimes remove a slight headache, but it will probably return; with salicylate treatment it is quite a different matter, the headache is gone once and for all and shows no sign of return for a considerable period; its action in this respect is very similar to that of calomel, and, like calomel, it seems to free the secretions of the mouth, and, at the same time, slightly relaxes the bowels.

The dose of salicylate which DR. HAIG uses is two to three grains every quarter or half hour for three or four doses or more, as recommended by DR. BRUNTON, and begun when the headache first comes on; this is sufficient. A patient might carry ʒ i of the powder in his pocket and take a little when a headache threatens, and he would soon learn to judge the proper dose by sight.

And as to diet, from which meat, cheese, beer, wine, and spirits are absent, experience has more and more convinced him of its value in such cases.

DR. HAIG thinks that under the term megrim are probably included, for want of definition, several different forms of headache; but where a patient suffers from chronic and recurring headache for a considerable number of years or all his life, and has a family history either of manifest or quiet gout, while several of the minor signs of gout are present in his own person, he thinks that there is a real connection between the headache and the history.

And, further, as it is by no means uncommon to find in the post-mortem room that there are urates in the joints of persons who are not known to have had manifest gout, and that such urate deposits are often associated with granular kidneys, hypertrophied heart, degenerate vessels, and cerebral hæmorrhage. He is inclined to believe that the diet treatment of these forms of headache may mean much more than the alleviation of their pain, and that if it is begun early in life it may possibly prevent or greatly delay the more serious and fatal developments.

THE INTERNATIONAL MEDICAL CONGRESS.

With the late meeting of the American Medical Association came the last opportunity to adjust the unfortunate differences which arose in connection with the management and officering of the International Medical Congress, which is to meet in Washington, D. C., next year. The opportunity has gone by both without such adjustment, and without the slightest effort in that direction. While there may remain a difference of opinion touching the wisdom and justice of the action of the Association in deposing the original committee and in regard to the subsequent details, to which it is not necessary again to refer, there can, we take it, be little difference of opinion in regard to the policy of allowing the last opportunity to rectify the alleged wrongs of which so much had been written in condemnation during the preceding year, to pass without the shadow of an attempt at improving it. It would be extremely difficult to frame a plausible excuse for this failure. A very respectable proportion of the profession—respectable both as to number and standing—honestly believe that the Association committed an error in its re-arrangement of the original committee, and in giving the committee power to re-officer the Congress. These dissenters felt that they had competent and faithful champions, self-constituted though they were, in certain medical journalists and prominent practitioners in the eastern medical centres. They expected that these gentlemen would consistently fight for what they held to be right, and against what they held to be wrong, as long as opportunity for fighting with a possibility of victory, offered, and they certainly expected that an effort commensurate with the noisy protests of last year, would be made at the late St. Louis meeting. Their disappointment and disgust at the late exhibition of phenomenal flunking can, therefore, be better imagined than described.

And the failure of these gentlemen to make an honorable fight, is not the worst feature of the case. It transpires that they have concluded to withhold their influence and support from the Congress, thus giving an exhibition of the dog-in-the-manger spirit which ill becomes them, not only as scientists but as American citizens. The honor of the American medical profession is pledged to make the Congress a success, and it behooves every American regular practitioner to do his utmost in that direction. If the fight against the present management was animated by any other motive than the best interests of the Congress, the fight was unworthy in the extreme. It was the bounden

duty of those who opposed the present management to fight it for all, the concessions which they conceived it possible to gain, but having made their fight it becomes none the less their duty to gracefully submit to the will of the majority, and to turn in and assist the project, even though the methods adopted for its furtherance do not meet their approval. The invitation to the Congress to meet in this country next year has been accepted in good faith, and while we may have quarreled among ourselves touching certain details, we cannot, now that these details have been finally arranged, honorably or consistently with any proper conception of hospitality, withhold from the Congress our most cordial countenance and support. The spirit which prompted the ancient warrior to sulk in his tent, is unworthy the patriotic American physician at this particular juncture, and we sincerely hope that the profession of this country may be found, ere many weeks, to have risen superior to the churlishness of which there is such an exhibition in quarters where it is most unbecoming.

CROUPOUS TONSILLITIS AND DIPHTHERIA.

In an elaborate article in the N. Y. Medical Journal, Dr. L. Emmett Holt discusses the non-identity of these two affections. He tabulates the points of contrast between them as follows:

CROUPOUS TONSILLITIS.	DIPHTHERIA.
1. Invasion abrupt.	1. Much more often it is insidious.
2. Most marked general disturbance during the first two days; no tendency to asthenia.	2. Generally not much general disturbance before the third day, but after that marked tendency to asthenia.
3. Starts with a temperature of from 103° to 104 5°.	3. Rarely high in the beginning, 100° to 101°, gradually rising till the fourth or fifth day.
4. Pulse full and rapid.	4. When rapid it is feeble.
5. Membrane of yellowish color; edges sharply defined, limited to tonsils; does not bleed when detached; superficial; not very adherent; no tendency to reform after removal; appears early; does not spread.	5. Color gray, sometimes greenish; shades off gradualln; on vulva, soft palate, and pharynx as well as the tonsils; bleeding readily,even without being detached; infiltrates the deeper tissues; adherent; strong tendency to reform after removal: may not be seen the first or even second day; spreads steadily.
6. Albuminuria rarely, if ever present.	6. Albuminuria rarely absent.
7. Reaches its height by the second day; by the fourth, the patient is generally convalescing.	7. Most commonly does not reach its height before the fourth day.
8. Paralysis never follows as a sequel.	8. Paralytic sequelæ quite common
9. It is doubtful if it is ever contagious.	9. Frequently spreads by contagion.

Undoubtedly, all exudates on the tonsils are not diphtheritic, and, without doubt, in active practice, many cases are reported as diphtheria which are not such, but the liability to erroneous diagnosis, by most honest and competent practitioners, is great, so closely do the local manifestations and systemic disturbance of the benign and the malignant affections resemble each other. This liability to error needs scarcely a better illustration than that afforded by the above table, prepared by a gentleman evidently as familiar with diphtheria as the present knowledge of the disease permits. No practitioner will concede the correctness of all or even a majority of the points placed in contrast. While diphtheria is usually preceded by a period of malaise, we have known cases to terminate fatally in a few days, in which the child retired as well as it ever was in its life, and awoke during the night with a temperature of 104°, with severe inflammation of the tonsils and without the faintest perceptible trace of an exudate. The whole nine points of difference given might be gone through with and, with the exception of the eighth, the characteristics of croupous tonsillitis as given, will be recognized as not inapplicable to diphtheria. We have, moreover, seen paralysis of alarming severity follow two cases of adults, in which the throat symptoms and systemic disturbance were not sufficiently severe to prevent the patients from going about in the discharge of their usual duties

While articles like that by Dr. Holt may be of interest from a scientific point of view, their effect on the general practitioner is not beneficial. The attempt to make the nice distinctions therein sought to be made, would be very apt to result in serious blunders. It will be found to be the safer plan, in so far as both the patient and those with whom it is liable to come in contact are concerned, to err on the side of regarding all cases of exudate on the tonsils (excepting, of course, cases of unquestionable follicular tonsillitis) as diphtheria, and treating them and isolating them accordingly. If, as some maintain, diphtheria is primarily a local disease, with secondary systemic involvement from absorption of ptomaines from the dead tissue, the danger of allowing a day or two to elapse before applying an antiseptic to the throat needs scarcely be pointed out.

Notes.

The Eclectics have resolved to take a part in the proceedings of the International Medical Congress next year. The Georgia Eclectic Medical Journal laughs to scorn the suggestion that they will not be allowed to enter. "Well," it says, "we will see about that. The Hardshell Allopaths, the mud-gods of medicine, cannot control the International Medical

Congress by any cranky, arbitrary acts. We will go to the Congress; this is settled; and we will be admitted, too." This desire of our Eclectic brethren to sit down with the exponents of rational medicine is an eminently laudable one, and indicates a growing respect for the "mud-gods." We fear, however, that they are reckoning without their host. They have, evidently, forgotten that the coming Congress has been cut out on a very strict Code bias, and that even "regulars" who have evinced the slightest deflection towards irregularity, have been relegated to rear seats. If the erstwhile lights of regular medicine who are tainted with the new Code heresy, shall scarcely be permitted to enter the Congress, how hardly shall those who have openly denounced and defied the Code escape the condemnation of the committee who shall decide on the eligibility of members! We fear our eclectic brethren are slightly previous.

Ex-President Arthur's condition continues to excite the anxiety of his friends, although the public is kept in blissful ignorance of his ailment. It has been the practice of late years to keep the people posted, by means of bulletins issued at regular intervals, of the condition of men whose claims on the public are of a national character. Certain cynics have objected to this, holding that it brings the attending physician or physicians into undue prominence, and some going so far as to even intimate that such bulletins are primarily issued for the benefit of the latter, rather than for that of the public. While there may be a modicum of truth in this view, the fact remains that there are citizens in whom the public have a peculiar interest and whose welfare is a matter of national concern In such cases it is a species of pedantry which keeps their attending physician from announcing their condition and prospects for recovery, in the event of sickness.

Dr. Dio Lewis is dead. His life was chiefly devoted to the dissemination of a knowledge of personal hygiene among the masses, and, doubtless, it was not altogether spent in vain. He was a cremationist, and gave the following directions in regard to the disposition of his body: "Although I am averse to the somewhat unpleasant notoriety which, as yet, cremation involves, my very strong conviction is that it is the right disposition of the dead. I leave directions that my body shall be cremated, and that the ashes shall not be put into an urn, but into the earth, over which my wife may lovingly plant forget-me-nots. I direct, also, with my dear wife's assent, that all funeral parade and expense shall be avoided, and that my remains be placed in a pine casket for removal to the crematory. I desire, also, that no flowers may be sent by my friends."

New York Medical Monthly, is the name of a new 16-page journal, which has come to our table. It is edited by Dr. J. Leonard Corning who has the promise of support from a large list of contributors, which he publishes, and which contains the names of physicians of national reputation, Cornelius R. Agnew, Fordyce Barker, Alfred L. Loomis, Fessenden N. Otis, D. B. St. John Roosa, and T. Gaillard Thomas being among them. The initial number gives much promise and we wish the venture all success. It will appear monthly. Subscription price $1. A truly good western editor attempts to discourage practitioners from contributing to dollar-journals, but we hope his great influence may not extend to this new journal.

New York seems to be blest with an endemic of liberality which finds its expression in the direction of medical science and charity. The latest beneficiary is the Medical Department of the Univercity of the city of New York, which has received a gift of $100,000 to be devoted to the construction and maintainance of a laboratory building, to be known as the Loomis Laboratory. The munificent donor has accompanied the gift with a request that, for the present, his name be not made public. Such liberality coupled with such absence of ostentation, is phenomenal in these days. Struggling colleges and medical charities will continue to pray that the New York endemic may speedily burst its confines and become epidemic.

The daily papers, of St. Louis, showed their wonderful artistic skill and nose for news of a personal nature, during the late meeting of the Am. Med. Assn. in their city. The cuts of the more or less eminent gentlemen which embellished their columns were, of course, made from sketches by "our special artist," and the likenesses were, in many instances, quite as striking as if the artist had had photographs of the parties to work from. The accompanying biographies, also, showed an intimate familiarity with the prominent medical gentlemen of different parts of this broad land, which certainly redounded to the credit of the members of the fourth estate.

Upwards of eight of the rioters who broke open the Chicago drug-store and regaled themselves with the wines which they found on the shelves—wine of colchicum among the rest—have crossed the bourne the returns from which are few and somewhat apocryphal. The despatch with which the crossing was effected, will encourage the authorities to insist on the druggists laying in a full stock of this drug against future possible deployments under the red flag. As a remedy for anarchy it is S. S. S. —sure, speedy and sweet—much more pleasant

than cannabis and plumbum, the agents heretofore mainly relied on.

We have it on the authority of the Medical Record that a prominent publisher of regular medical books sells more books, proportionately, to homœopaths than to regular physicians. The fact is but an addition to the accumulating evidence of the decadence of homœopathy as a system of therapeutics. The number of consistent homœopaths, whom the public regard as such, is rapidly growing beautifully smaller, and the time is not far distant when only cranks and men who sail under the name as the pirate sails under the flag of an honest merchant-man, will fly the legend "homœopath" on their shingles.

The fact that the American Medical Association at its late meeting took no action on the death of Dr. Austin Flint, has justly laid the Association open to criticism. Dr. Flint was an ex-President of the Association, and in addition, was, probably, the ablest distinctively medical author and teacher which this country has ever produced. He was, moreover, one of the staunchest friends of the Association and an uncompromising adherent of its Code of Ethics. The failure to take appropriate action on his death was, doubtless, due to oversight and not, of course, intentional, but even oversight under certain circumstances is culpable.

The Vanderbilt family has been quite liberal in its benefactions to medicine and charitable medical institutions. The late Wm. H. contributed half a million to the College of Physicians and Surgeons, his daughter, Mrs. Wm. D. Sloane, followed with an endowment for a Maternity Hospital, and now come his four surviving sons with $62,500 each for the erection and maintenance of a building to be devoted to clinical instruction, and to be known as the Vanderbilt Clinic. The several benefactions of the family aggregate a million dollars.

We are pleased to behold again the name of Dr. J. S. Jewell, of Chicago, on the title page of a journal devoted to the branch of medicine in which he has made for himself a name—neurology. The name of the new venture is The Neurological Review, and it will appear monthly. Dr. Jewell is a veteran editor and wields a pen which long use has made quite pointed. We wish for his Review that full measure of support which its style as exhibited in its first number, and the reputation of its editor, richly merit for it at the hands of the general practitioner.

It was a sight to behold the late meeting of the American Medical Association from the rear. A larger proportion of bare vertex presentations was, probably, never before in attendance at any meeting. A rough estimate showed that at least one doctor in every four had shed the capillary from the dome of his brain pan. The sight was a striking illustration of the fact that while temperance, chastity, and mental industry are conducive to happiness, these virtues are not promotive, but, on the contrary, are rather destructive of the growth of hair.

The Quarterly Journal of Inebriety lays it down as an asylum axiom that an intoxicated man must never be contradicted or reasoned with. Tell him clearly and kindly what you wish him to do, and then have power to compel obedience. That may do all right in an asylum, but we have seen intoxicated men in private practice in dealing with whom coercion would be a more dangerous experiment than either contradiction or reason. The best rule with drunken men is to leave them severely alone.

M. Debove told a hysterical man, who was about to leave the hospital, and whom he had put to sleep, that he would be paralyzed that afternoon. The prediction was realized, the man falling "paralyzed" on the street. He was carried to another hospital, where his case was diagnosed as a medullary affection of syphilitic origin, and treated accordingly, but to no purpose The patient was finally brought again to Debove, who again put him to sleep, and told him he was cured. The remedy was a success.

Dr. John McLean Hayward, of whom no one heard during his life, recently died at Wayland, Mass. He has now got his name in the papers. The stone which will mark the spot where his mortal remains will mingle with their kindred dust, will bear this legend, written by himself for his own epitaph: "Here lies the body of John McLean Hayward, a man who never voted. Of such is the Kingdom of Heaven." The other kingdom is to be congratulated on its escape from the ingress of at least one idiot.

The mortality report of the city of Detroit for the month of April, shows thirty-one deaths from phthisis pulmonalis, out of a total mortality of 286. Diphtheria is charged with 20 deaths; scarlatina, with 14; morbilli, with 13; convulsio, with 23; pneumonia, with 13; senectus, with 8; partus emortuus, with 25; and partus intempestivus, with 8. Senectus, p. emortuus and p. intempestivus, it may be necessary to explain, are the terms by which the health officer indicates old age, still births, and premature births, respectively.

A Chicago doctor who sat so heavily muffled in a street car as to completely conceal his identity, was treated to a scrap of conversation

at his expense, which quite amused him. "Do you know Dr. ——?" asked one passenger of another. "All I know of him is that he snatched an aunt of mine from the grave last summer," was the reply. "Did he, indeed? Well he must be a good doctor. What ailed your aunt?" "Oh, she was dead and buried, you know."

Dr. Oliver Wendell Holmes is too sensible a man not to insist on the benefit of a vacation, but it is a little unkind to his fellow-toilers for him to insinuate, as he does in his poem, "City and Country," that when a doctor takes a lay-off it inures to the benefit of the public:

> "Ye healers of men, for a moment decline
> Your feats in the rhubarb and ipecac line;
> While you shut up your turnpike, your neighbors
> can go
> The old round-about road to the regions below."

Northwestern Lancet; A white tongue denotes a febrile disturbance; a brown, moist tongue, indigestion; a brown, dry tongue, depression, blood-poisoning, typhoid fever; a red, moist tongue, inflammatory fever; a red, glazed tongue, general fever, loss of digestion; a tremulous, moist and flabby tongue, feebleness, nervousness; a glazed tongue, with blue appearance, tertiary syphilis.

A New York doctor has the following "chestnut" printed on his bill-heads: "A patient's gratitude to his doctor is a part of his disease, and is most declared when his fever is the highest, cools off during convalescence, and entirely disappears with the complete return of health. All bills due on presentation. Office prescriptions and attendance strictly cash."

The patients bitten by the rabid wolf, who were brought to Pasteur from Russia, seem to have been but slightly benefitted by the treatment, several of the number having already died. Pasteur holds that the rabietic virus as it exists in the wolf is of a different nature and more virulent than that found in the dog.

It may not be *mal a propos*, in view of the present agitation in industrial circles, to call attention to the fact that Moses was the original boy-cutter. The operation was, however, attended by none of the serious impediments to labor which characterize the present excitement.

Book Notices.

The International Encyclopædia of Surgery. A Systematic Treatise on the Theory and Practice of Surgery by Authors of Various Nations. Edited by John Ashhurst, Jr., M. D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with Chromolithographs and Wood-cuts. *In six volumes. Vol. VI. New York: Wm. Wood & Co.

This is the concluding volume of this great work on surgery—the greatest in some respects, and the inferior in none, which has yet been issued from the American press, or, indeed, from that of any other country. The volume concludes the consideration of the Injuries and Diseases of the Various Regions of the Body, and supplies certain articles which were omitted from the previous volumes, and which were necessary to the full completion of the work. The subjects comprised in this volume are Injuries and Diseases of the Œsophagus, by J. Solis Cohen, Philadelphia; Intestinal Obstruction, by John Ashhurst, Jr., Philadelphia; Injuries and Diseases of the Rectum, by Wm. Allingham, London; Urinary Calculus, by E. L. Keyes, New York; Lithotrity, by Wm. H. Hingston, Montreal; Injuries and Diseases of the Bladder and Prostate, by Reginald Harrison, Liverpool; Injuries and Diseases of the Urethra, by Simon Duplay, Paris; Injuries and Diseases of the Male Genital Organs, by H. Royes Bell, London; Injuries and Diseases of the Female Genitals, by Theophilus Parvin, Philadelphia; The Cæsarian Section and its Substitutes, by Robert H. Harris, Philadelphia; Ovarian and Uterine Tumors, by Charles Carroll Lee, New York; Inflammatory Affections of the Bones, by L. Ollier, University of Lyons; Scrophulo-Tuberculous and Other Structural Diseases of the Bones, by Eugene Vincent, of Lyons; Orthopædic Surgery, by Frederick R. Fisher, London; Construction and Organization of Hospitals, by Edward Cowles, of Massachusetts; Preparation of Military Surgeons for Field Duties, by Bennett A. Clements, U. S. A.; A History of Surgery, by George Jackson Fisher, New York. The names of the authors of these articles are, in most instances, guarantees in themselves of the excellence of the matter which they have contributed.

The issue of this last volume completes a task which engaged all the leisure time of the editor during the past six years. That he has given a work which merits for him the gratitude of all whose practice includes surgery, must be apparent on the most superficial examination of the six volumes. But if gratitude be due the editor, what is the obligation under which the publishers have laid the profession? It owes it to itself to secure to this great work an extensive sale. This practical exhibition of this sentiment is the least it can do.

Report of a Case of Cæsarian Operation, with some Comments. By Edward W. Jenks, Detroit, Michigan.

This is a reprint of a paper read by the author before the American Gynæcological Association. The case reported is one of much interest. It occurred in a patient in Canada, 27 years of age, and the mother of one child, five years of age. Three years after the birth of

this child the woman met with an accident, through which the right ilium was fractured. The deformity produced consisted in a "shelf of bone" which prevented the successful employment of either forceps or cephalotribe by the physicians in attendance, and Dr. Jenks was sent for. He, too, found it impossible to adjust more than one blade of the forceps, and the Cæsarian was the *dernier ressort*. Dr. Jenks regards it as very important that craniotomy was performed in this case, and thinks the nature of the deformity should have excluded all attempts at delivery *per vias naturales*. He concludes his paper with the following propositions:

I. The capabilities of the Cæsarean operation are unjustly shown by the general record.

II. The statistics of this operation plainly exhibit the great mortality following fruitless attempts at delivery, and a recourse to Cæsarean section as a *dernier ressor'*.

III. The statistics further show that the Cæsarean section, when made on the first day of labor, is no more dangerous to the life of the mother than embryotomy, and it does afford an opportunity for delivering the child alive.

IV. The statistics still further show the great advantage of making the Cæsarean operation early, *i. e.*, before the woman becomes exhausted.

V. The best results obtained thus far, with few exceptions, having been obtained without any of the improved methods of the present time, we are warranted in reiterating the first proposition, and further adding that the recent improvements in the *technique* of the operation furnish for the future a promise of much better results.

VI. The success of ovariotomy at the present time, owing to the wise precautions of operators and their improved modes of operating, sustain the conclusion that, if the same precautions are instituted and similar modes of operating are carried out in timely Cæsarean cases, success will be more common, and the record will show that recoveries following Cæsarean operations will be as frequent as those which follow other abdominal sections.

The Methods of Bacteriological Investigation. By Dr. Ferdinand Hueppe, Docent in Hygiene and Bacteriology in the Clinical Laboratory of R. Freserims, at Weisbaden. Translated by Herman M. Biggs, M. D., Instructor in the Carnegie Laboratory, and Assistant to the Chair of Pathological Anatomy in Bellevue Hospital Medical College. Illustrated by thirty-one wood-cuts. New York: D. Appleton & Co.

The prominence or importance which bacteriology has achieved or assumed within the past few years has made the want of a systematic treatise on the subject in the English language, all the more keenly felt. The Germans have done most in this special line of work, and, as a consequence, the literature of the subject has been chiefly in the German tongue. The publishers have, therefore, filled a want by giving to the English-reading portion of the profession this work. The translation is good, showing both a familiarity with the two languages and an intimate knowledge of the subject. A critical review would involve a knowledge of bacteriology which we do not possess, but the positions of the author and translator may, we think, be accepted as a sufficient guarantee by those who desire to pursue investigations in this direction.

Formulary.

Therapeutics of Hippurate of Soda.—Garrod, having demonstrated by numerous observations that hippurate of soda readily caused the decomposition of uric acid, Dr. Bon proposes to utilize this property and administer the hippurate in affections characterized by excess of uric acid in the economy. He uses the following formulæ:

℞ Hippurate of sodium, 515.
Carbonate of lithium, 155.
Glycerin, 15.
Distilled cinnamon water, 240.
Dose, four spoonfuls a day.

℞ Hippurate of sodium, 7.
Chlorate of potash, 150.
Simple syrup, 24.
Mint water, 180 gr.
Dose, four to six spoonfuls a day.

Dr. Delingy, in Jour. de Med. de Paris.—*Canadian Practitioner.*

Treatment of Acute Tonsillitis.—Dr. John Brown states, in the British Medical Journal, that it is a rare event for suppuration to occur in acute tonsillitis, if treated early with the following mixture:

℞ Sodii salicylat., ʒ iss.
Pot. bicarb., ʒ iss.
Tinct. aconit., ♏ 40.
Liq. opii sed., ♏ 30.
Sp. chloroform, ʒ ii.
Aq. ad. ℥ viii.
M.

One ounce to be taken every two or three hours for the first thirty-six hours. The same mixture is his sheet-anchor for rheumatic fever.

Resorcin in the Abortive Treatment of Gonorrhœa.—Munnich (Monatsch. f. prakt. Dermat., 1885, No. 6; Ctrlbl. f. Chir., April 24, 1886) recommends injections of a two- or three-per-cent. solution of resorcin as most certainly

and rapidly curative of gonorrhœa. At first they should be used every two hours by day and twice during the night; afterward less frequently.

A Disinfectant Dressing for Uterine Cancer.—M. Gillette is credited by the Union Médicale with this formula:

Iodoform, 270 grains.
Sulphate of quinine, 45 grains.
Powdered charcoal, 225 grains.
Essence of mint, 40 drops.

Cotton tampons imbued with this powder are to be applied to the ulcerated surface (which should not be cleansed), at first every four days, and afterward every ten days.

Aconite Tablets.—M. Pierre Vigier (Gaz. hebdom. de méd. et de chir., April 6, 1886) suggests that it may be convenient to use aconite in the form of tablets, and gives the following formula:

Gum tragacanth, 7½ grains.
Orange-flower water, 75 grains.
Powdered sugar, 750 grains.
Tincture of aconite root, 200 drops.

Divide into one hundred tablets, from five to ten of which may be taken in twenty-four hours.

A Lotion for Pityriasis.—The Union Médicale attributes the following formula to M. Gueneau de Mussy:

Hydrochlorate of ammonium, 60 parts.
Glycerin, 3,000 parts.
Rose-water, 12,500.

—*N. Y. Medical Journal.*

Ointment for Eczema of the Hands:

℞ Oxide of bismuth, 2 grammes.
Oleic acid, 30 grammes.
White wax, 12 grammes.
Vaseline, 30 grammes.
Essence of roses, 2 drops.
M.

Medical Progress.

Fluid Extract of Kava Kava in the Treatment of Gonorrhœa.—By Herbert C. Rogers, M. D.—For several years I have substituted for the balsam of copaiva, or cubebs, or both, according to circumstances, the fluid extract of kava kava. I have rarely found copaiva or cubebs alone sufficient for the cure of the disease. The former very often causes annoying skin eruptions before it has produced the effects for which it has been prescribed, and I have been obliged to lay it aside. Cubebs has not proved more successful in my hands. I have tried cubebs alone, in powder and in fluid extract, and when it has not succeeded I have combined it with balsam copaiva. One of the great objections to the use of copaiva is its extremely nauseating taste, and another is the amount of disturbance it produces in the stomach. The fact last stated is the reason why I have given up entirely the use of copaiva in my hospital practice. The cases one meets with in a large hospital practice, suffering from gonorrhœa, are generally those of broken-down subjects who have more or less catarrh of the stomach, and in which their digestion is very poor.

A patient and friend, when abroad a few years ago, unfortunately contracted a gonorrhœa while visiting in Paris. He wrote to me and asked for a prescription. I sent him one containing balsam copaiva and fluid extract of cubebs. Several months later the patient called on me at my office, told me he had received my prescription, and had it prepared, but that after taking a few doses he was compelled to give it up, as it caused so much disturbance to his stomach. He went a few days without treatment, when his testicle commenced swelling and caused him so much annoyance and pain that he was compelled to send for a surgeon, who strapped the organ, and ordered him some medicine to take, remarking at the same time that it was the new drug for gonorrhœa. In two weeks my friend was all right.

It so happened that another one of the party contracted the same disease shortly after, and was also cured with but little loss of time. This gentleman was so much pleased with the medicine (having had the disease several times, and always having copaiva or cubebs prescribed for him, which invariably produced more or less nausea and destroyed his appetite) that he secured a copy of the prescription for future use.

After my friend had related the above, I asked him if he would try and obtain for me a copy. This he did in a few days. The prescription was for infusion of kava kava, half-ounce four times a day.

Having a little leisure, I looked the matter up, and found that the drug has been used in France for a considerable period. It was first recommended for gonorrhœa about 1857.

The best account of the drug that I have been able to find is in the New Remedies for October, 1876. From this I give a short extract:

"Kava kava is a shrub about six or eight feet high, with stems varying from one to two inches in thickness. The leaves vary from six to eight inches in length, and are nearly as broad as they are long. They are cordate, tapering somewhat suddenly into a very short acute apex. The petiole is usually one to two inches long, and is dilated at its base. The root is large and fibrous, but rather light and spongy in texture. The root has a pleasant odor, resembling lilac. It has a slightly pungent taste, and causes an increased flow of saliva, with a slightly astringent sensation in the mouth, with a little bitterness. The root and base of the stems are the portion generally used.

"The form in which it is generally used in medicine is an infusion made by macerating about one drachm of the scraped root in a quart of water, and also a fluid extract, one minim representing one grain of the root. The

latter preparation is the best suited for general use.

"The action of kava-root appears to vary with the amount taken. In small doses it is said to act generally as a stimulant and tonic; but when taken in large doses it produces intoxication, which differs from that caused by alcohol in being of a silent and drowsy nature, accompanied by incoherent dreams, the drinker not being quarrelsome or excited. The taste of the plant is pleasant, while its bitterness improves the appetite and does not produce nausea."

During the past two years I have treated in all 105 cases of gonorrhœa; of these, 34 were in private practice, and 71 were at the hospital. The majority of those treated in hospital practice had had the disease once or oftener previous to the attack from which they were suffering when they first consulted me. One patient, a Swedish sailor, claimed that he had had the disease a dozen times, and stated that he had been operated upon by the late DR. GEORGE ATKINSON for stricture. When I first saw him he was suffering from a sharp attack of gonorrhœa; his testicle was swollen, and altogether he was in a bad condition. He was ordered to take fluid extract of kava kava in thirty-minim doses four times a day, and to apply a wash of liq. plumbi et opii to the inflamed organ. In three weeks the discharge had dwindled down to a watery condition, which remained in spite of all I could do. After trying all known means, I was compelled to cut him. He stood the operation badly, and made a slow recovery; but in two months the wound had healed, and the discharge had entirely dried up. This case was the longest one on my table.

Of the 71 cases treated at the hospital, 43 were discharged in from six to nine weeks, cured; 13 improved, but were lost sight of before two weeks had passed; 7 never returned; and in eight the drug did not seem to have any effect.

Of the cases in private practice, nearly two-thirds were suffering from the disease for the first time when they consulted me. The longest period that a patient of this class remained under my care was thirteen weeks. This case was that of a gentleman, and a member of one of the New York clubs. He was a bachelor, addicted to good living, and particularly fond of champagne. In spite of my warnings, after he came under my treatment, he took his wine occasionally, with the invariable result of starting up a brisk discharge. After repeating this several times, he at last left his wine alone for three weeks, when the discharge entirely ceased.

The shortest period that any patient suffering from this disease has been under my care was twenty-seven days. This was the case of a young man at college, who, while spending a few days at home, chanced to contract a mild case of gonorrhœa. When he first consulted me about the discharge, he could hardly believe what I told him. To convince him, I examined the young woman with whom he had had intercourse, and found her recovering from gonorrhœa. She had been treated by a New York surgeon, who informed me by letter that she had been under treatment for six weeks. It so happened that this young woman shared her favors with several young men. The morning following this examination. I was called upon by a friend of the last patient, who acknowledged having had intercourse with this same girl on the morning of the day she called upon me. Having learned that his college friend had contracted his disease from her, he was greatly alarmed, fearing that he also might have taken it I examined him carefully, but could not discover the least evidence of trouble. To pacify him, I injected his urethra with a solution of hyd. bichlor., one in five hundred, and placed him on twenty-minim doses of kava kava three times daily. At the end of one week he presented no evidence of disease and was discharged.

The average period of gonorrhœa patients under my treatment has been about nine weeks. I had but few complications. In only three cases was there swelling of the testicle. About one-fifth suffered from chordee.

In none of the cases was there any trouble with the stomach resulting from the use of kava kava. In over one-half the appetite was improved and increased. In one case the peculiar effect of the drug was manifested. The patient was a married man, whose wife was in the country when he contracted the disease. As he expected her home in three or four weeks, he was anxious to get well. Under the influence of this feeling, he took much more of the drug than was prescribed. Instead of taking it every four hours, he took it every three. At the end of the third day I was sent for. I found my patient suffering from a mild form of delusion. I stopped the medicine and gave a small dose of opium. By morning he was feeling all right. This is the only case that showed this symptom.

My usual prescription is from twenty to thirty minims of the fluid extract of kava kava in water, to be repeated every four or five hours, as the case may be. The patient is restricted to plain food and plenty of milk, with Vichy water. He is not allowed to indulge in alcoholic drinks, in tea or coffee. Smoking (if he has the habit) must be given up for the time. The bowels must be moved gently, and care must be taken that the patient does not become constipated. From what I have seen, however, in connection with the use of the drug, I am inclined to think it is mildly laxative, as all my patients, while taking it, had one or more movements from the bowels each day.—*Medical Record*, May 8th, 1886.

THERAPEUTICS OF EPILEPSY.—In the course of a paper on this subject, published in the N. Y. Medical Journal, April 24, 1886, DR. C. L. DANA remarks:

If one may be permitted to be aphoristic on subjects like this, I would express my views regarding the therapeutics of epilepsy as follows:

I. Diet, exercise, and proper hygienic treatment, including baths, rank above all other single therapeutic measures.

If I had to choose between them and bromides even, I would select the former. On the whole, I fear that the reign of bromides has made the condition of epileptics more miserable than it was before, and has done our patients an actual harm. At the best, not more than five or ten per cent. of epileptics can be cured, while the majority are reduced by bromides to a state of physical enfeeblement

and distressing mental hebetude. Besides, physicians now fly to the bromides, and, trusting to them, neglect the searching inquiry into the exciting cause, or the careful direction of the patient's habits, which are so essential.

All medical experience unites in ascribing benefit to judicious regulation of diet and exercise. The only difference of late years is that we do not now believe epileptics should be starved.

Epileptics should live on plain, easily digestible diet, containing a preponderance of fat. A special meat diet, or milk diet, or farinaceous diet, is not injurious nor curative. It all depends upon the patient. A meat diet may be best if the patient is lithæmic or has a fermentative dyspepsia. A milk diet is especially useful for children and erythritic women. The meals should be small, and, in case of voracious appetite, four, five, or six light meals a day should be given. No heavy meal should be taken within four hours of sleeping. Indeed, no heavy meals should be ever be taken by epileptics. Special diets have often to be rigidly laid down simply as a matter of discipline, since patients will not follow any general directions. I believe that the urine and digestive functions should be carefully studied, and that thus we shall find indications for selecting the right kind of food.

II. The bromides take the second rank in the treatment of epilepsy.

All bromides act alike in this disease. If one does not cure, another will not. Occasionally changing and mixing reduces the attacks for a time, and benefits the stomach.

III. The best bromides are those of potassium, sodium, ammonium, and hydrogen (hydrobromic acid); possibly we may add nickel.

Bromide of potassium is the most trustworthy.

Bromide of sodium is more agreeable to the taste, less irritating to the stomach, and milder in its effects, but is eventually just as depressing as other forms.

Bromide of ammonium has a brief stimulant effect on the circulation.

Hydrobromic acid is useful in those cases in which there are indigestion and phosphaturia, and an alkali is contra-indicated. It produces acne less readily than the alkaline bromides.

IV. Bromides should be gived in daily doses of ʒ j, increased gradually until the attacks are suppressed, or the dose reaches ʒ iv to ʒ j daily. Few patients can tolerate more than this latter dose. Thorough bromidization should be always tried if necessary to stop the fits, and it may be occasionally repeated. But bromidization is sometimes injurious, even making the disease worse, and it must always be employed with caution.

V. When the fits are suppressed the bromides should be carefully reduced, but never entirely stopped for at least two years after the last fit.

VI. In most cases, and especially in nocturnal epilepsy, an extra large dose of bromide should be given at night.

VII. It is very important that bromides should be chemically pure, and their use should be continued a very long time, and that their depressing effects should be offset by tonics and and all possible roborant measures.

VIII. The best non-specific adjuvants (drugs) to the bromides are potassium iodide (in syphilitic epilepsy), potassium bicarbonate (in lithæmic and rheumatic states), carbonate of ammonium, the hypophosphites, arsenic, iron, and quinine.

IX. The other chief adjuvants to the bromides are diet, exercise, a regular life, hydrotherapy, counter-irritation on the neck, and, in the line of drugs, zinc, belladonna, strychnine, valerian, and the nitrites. Combinations of bromides with the other drugs mentioned will lessen attacks when bromides alone will not.

Other drugs which sometimes help the bromides are digitalis, *Cannabis indica*, ergot, conium, chloral, the salts of copper, picrotoxin, and borax. None of these do any permanent good alone, and their value as adjuvants is not uniform or generally conceded.

X. The best substitute for the bromides when these do no good or do harm, are belladonna, zinc, strychnine, glonoin, borax, and alteratives.

XI. Bromides stop the fits in from five to ten per cent. of cases, oftener if given early in the disease, if given to young children, and if given in cases that develop after twenty-one.

Bromides lessen the fits in from eighty to eighty-five per cent. of cases.

Bromides do no good, or do actual harm, as regards frequency of attacks, in from five to ten per cent of cases. Bromides do no actual good to the patient in a much larger proportion of cases.

XII. To prevent bromide acne, arsenic, calcium sulphide, baths, and diuretics are the best measures, or hydrobromic acid may be used.

To prevent bromidization, adopt all possible roborant measures: use salt-water baths and regular physical exercise, give black coffee, caffeine, cocaine, mineral acids, strychnine, bitter tonics, cod-liver oil, or give large doses of the bromides every three days only.

In all cases dilute the bromide, preferably with carbonic acid water or Vichy, in the proportion of six ounces of water to a scruple of the drug.

The continuous administration of an alkaline bromide in an alkaline water sometimes affects the bladder, and then the bromides can be given dissolved in hydrobromic acid.

XIII. The remedies that are especially useful in *petit mal* are, after the bromides, belladonna, glonoin (?), *Cannabis indica* (?), cod-liver oil, ergot (?), counter-irritation at the back of the neck, and cold spinal douches.

XIV For epilepsy in children, besides the bromides it is advisable to employ a milk diet, rest, and oxide of zinc. Belladonna, if tried, should be given cautiously.

XV. For adults and chronic cases, use the bromides, belladonna, iodide of potassium, and ammoniated sulphate of copper. Oxide of zinc is here of less value.

XVI. For nocturnal epilepsy, increase the dose of bromide at night, and add chloral or digitalis. Give also, if needed, strychnine. Raising the head of the bed or making the patient sleep in a chair at night, are measures to be tried.

XVII. For hysterical and erythritic cases, with or in place of bromides, give a diet of vegetables. Try turpentine, valerian, or zinc. Belladonna is usually contra-indicated.

XVIII. Counter-irritation by means of blisters, issues, and setons at the back of the

neck, is a useful adjunct to treatment, especially in *petit mal* and in cases with mental derangement.

XIX. For the status epilepticus, give large enemata of chloral, and use emetics and purges. Venesection is often efficacious, morphine is dangerous, chloroform is only palliative, and nitrite of amyl is of little value.

XX. To prevent impending attacks, the best remedy is nitrite of amyl, which may be carried in a phial filled with cotton. Inhalation of chloroform or ammonia, the internal administration of ammonia, spirits of lavender, or alcohol, a sternutatory, and pressure on the carotids—all are measures which sometimes stop the attack.

XXI. Alterative and habit-breaking drugs, such as mercury, iodide of potassium, arsenic, antimony, are useful in epilepsy.

XXII. No surgical measures upon ovaries, uterus, testicles, cranium, or elsewhere will cure an established long-standing epilepsy except in rare cases. Such operations, if done, should be undertaken early, before the patient has had an excessive number of fits.

THE VALUE OF COCA IN OVERCOMING THE OPIUM HABIT.—In article published in the Philadelphia Medical Times, March 20th, 1886, DR. WM. F. WAUGH relates the successful treatment of a case of confirmed opium addiction. As to the role of coca in the treatment of the opium habit he says:

For the purpose, therefore, of obviating the depression caused by discontinuing the stimulant, coca finds its field of action. At the time when my patient was accustomed to take his morning dose of anodyne, the distress was completely relieved by chewing coca.

I cannot account for the preference given by some to the hypodermic use of cocaine. I doubt if we are ever justified in teaching a patient the use of the hypodermic syringe. Even for physicians, whose eyes are open to its dangers, it is unwise to use it upon themselves. But it is still a vital point in the administration of a remedy that it should be available at the moment it is needed. This is why I prefer the coca-bola plugs, which are so easily carried, and can be used without attracting notice.

As in the alcohol habit, so in the opium addiction, the seat of the craving is often in the nerves of the mouth and stomach. The curious qualms complained of are located in the stomach. Hence, by this method of administration, we get the anæsthetic effect of cocaine on these nerves, in addition to the constitutional action of coca.

The chemistry of this drug has been by no means exhausted. It is probable that it has other valuable constituents besides cocaine. Recent investigations, not yet in print, have shown that in several popular wines of coca there is scarcely a trace of cocaine,—too little to be of any use: so that whatever virtues these preparations possess are due to other ingredients.

I am continually asked if there be any danger of the formation of a coca habit. Leaving open for the present the question of whether there would be anything objectionable in such a habit, I can only say that I have never seen it formed. Thirteen years ago I first met coca, in South America. Since then I have used it in hundreds of cases, and have yet to hear of any one becoming addicted to its use. Since the publication of DR. BRADLEY'S case I have quietly informed myself as to all the cases within my reach, and find the history quite similar in each. As the morbid appetite for which coca was given died out and the health became restored, the use of coca gradually decreased until it was no longer used. Repeated inquiries elicited the invariable response that no greater difficulty was experienced in discontinuing the use of coca than in quitting coffee or chewing gum.

The very remarkable cases of cocaine habit reported from the West are so unlike anything I have ever seen that had they appeared in the secular press I would have concluded they evolved from the inner consciousness of some hungry reporter. They may serve, however, to emphasize my remarks on the use of the hypodermic syringe

In conclusion, I desire to quote a few words from the patient whose case forms the basis of this paper. He said to me on his last visit, "Doctor, you told me I must expect a struggle, no matter how I was treated. Now, I cannot say I have had any struggle worthy of the name, nor have I felt the need of any great exertion of will-power. Every unpleasant sensation has been met by a remedy, and at no time have I felt any particular distress." I may add that I had repeatedly examined this patient's urine for morphine, and thereby verified his statement completely.

ETHOXYCAFFEINE.—DR. DUJARDIN-BEAUMETZ, at the suggestion of PROF. FILEHNE, of Erlangen, has made some investigations into the physiological and therapeutical properties of the derivatives of caffeine, and in particular of ethoxycaffeine. Ethoxycaffeine is in the form of white needle-shaped crystals, fusible at 140°, slightly soluble in alcohol and ether, and insoluble in water. It is strongly basic, and forms salts precipitable by the alkalies. It was first made by FISCHER, by treating caffeine with bromine and replacing one atom of H by one of Br., thus constituting bromo-caffeine, which by alcoholate of potassium is then converted into potassium bromide and ethoxycaffeine. This may be made soluble in distilled water by the addition of salicylate of sodium. It is given in doses amounting daily to twenty-five centigrammes to one gramme, and, as it sometimes causes pain in the stomach, it may be combined with cocaine, as in the following formula;

℞ Ethoxycaffeine, 0.25;
Sodii salicylat., .25;
Cocainæ hydrochlorat., .10;
Aquæ aurantii florum, 60.;
Syrup, 30.—M.

In facial neuralgia it has given decided relief, and even caused sleep, in doses of fifty centigrammes to one gramme in the day. It is in migraine, however, that the happiest results were noticed; in one case a single dose of fifty centigrammes (gr. viij) produced sleep lasting for two hours, and when the patient awoke the migraine had gone. Similar effects were observed in other cases of migraine. Overdoses

produced faintness and vertigo, or cramps in the stomach, and nausea. The following conclusions are submitted:

1. The introduction of the group ethoxyl or oxyethyl (OC_2H_5) in the atomic constitution of caffeine modifies its physiological and therapeutical properties, giving it a marked sedative action upon the cerebro-spinal system, and endowing it with incontestable narcotic powers.

2. In the dose of twenty-five centigrammes the therapeutic effects of ethoxycaffeine are especially appreciable in the treatment of migraine, and it has the advantage of substituting caffeine in the treatment of this disease.—*Bulletin Générale de Thérapeutique*, March 30, 1886.

Treatment of Morphine Habit with Cocaine.—Against the morphine habit every known remedy has probably been recommended and turned out useless. But during the last six months a number of reliable observers have published the records of cases in which muriate of cocaine really seems to have had a very decided effect in subduing that intense restlessness, and that great increase of reflex excitability, which both are such characteristic symptoms in cases of withdrawal of the morphine in those accustomed to its use.

Dr. Jaeckel is the latest of these authors (Deutsch. Med. Zeit., October 15, 1885). This article makes the impression of truth. He, like others recommending it, employs the muriate of cocaine by subcutaneous injection, but instead of using this remedy alone, he advises what to us appears a very judicious procedure, to add a small quantity of morphine to it. For instance, for every decigramme the patient was in the habit of using of the opium alkaloid daily, he employs a gramme of the cocaine during the whole treatment, and in the beginning he adds to it half the usual dose of morphine. Then day by day he slightly increases the dose of the cocaine, and lessens very materially that of the morphine. If a patient injected four times daily 10 grains of morphine (40 grains a day), 40 grains must suffice for the whole treatment. As a rule J. makes in such a case his injections also four times daily. He begins with about half a grain of the cocaine and 5 grains of the morphine the first day. The second day the dose of the cocaine is increased by ⅙ of a grain, but that of the morphine is diminished to 3 grains. By the tenth day the morphine has been omitted, while about one grain of the cocaine is injected four times daily.

J. has not seen any specially agreeable sensation set in after a hypodermic of cocaine, but great rapidity of the pulse he has frequently observed as the direct consequence of it. He also insists that the patient must not only be treated at an institution, but that he should remain there for a considerable time after the total withdrawal of the drug. In his experience relapses are to be feared the less, the longer the patient was kept in the hospital.—*Med. and Surg. Reporter*, April 3, 1886.

Results of Administration of Urethan in Ninety Cases.—The Medical News, May 15th, thus summarizes the action of urethan:

This new hypnotic appears to have properties worthy of the attention of the profession. Chemically it is an ethylic ether of carbamic acid, and when pure, consists of white rhomboidal crystals which are readily soluble in water. Schmiedeberg experimented with it upon animals, and von Jasch, Jolly, and others have studied its action in man. In suitable doses it produces a deep, dreamless, natural sleep from which the individual awakens refreshed and without the unpleasant sensations which so often accompany the use of a hypnotic. It does not appear to have any special action on the circulatory, respiratory, or excretory system. The effect of the drug seems to be exclusively upon the higher cerebral centres.

Eloy, in L'Union Médicale, Nos. 36 and 37, 1886, reviews its use in ninety cases which have been reported, including many of heart disease, phthisis, and neuralgia, in most of which it acted promptly and satisfactorily. In phthisis it seems also to allay the cough. Restlessness and insomnia, not pain, are the special indications for its administration. The dose as a sedative is from fifteen to thirty grains, and as a hypnotic thirty to sixty grains. It is not unpleasant to take, and is best given in a single dose.

If the statements regarding the action of urethan are borne out by subsequent experience, a very valuable agent has been added to the pharmacopœia—a powerful hypnotic acting on the cerebral centres, and without any of the unpleasant effects of morphine or chloral.—*Med. News*, May 15, 1886.

Jambol in Diabetes.—The New York correspondent of the Journal of the American Medical Association in the April 3d number states that Dr. Cauldwell narrated his experience with Jambol in diabetes at the meeting of the New York State Medical Association as follows:

He had prescribed it in four well-marked cases of the disease, in each of which the patient was passing more than 100 ounces of urine, while in all the specific gravity of the urine was above 1035. All the patients were treated alike, and, in addition to the use of the drug, was kept on anti-diabetic diet with a moderate allowance of toasted bread. Five grains of the powdered jambol seed were given three times a day. In the first case the effect was apparently quite remarkable. Within two months the patient gained twelve pounds in weight, and sugar disappeared entirely from the urine. For a month past it has remained absent. In the second case, on the other hand, no effect whatever was produced by the remedy, as far as could be perceived; but in the third and fourth cases the results were beneficial. In one the daily quantity of urine passed was reduced to eighty-two ounces, with a specific gravity of 1030 and in the other to fifty ounces, with a specific gravity of 1028; while in the latter case the patient had gained ten pounds in weight. In addition Dr. Cauldwell referred to two cases which had been under the care of Drs. Keyes and Alexander, in one of which the improvement had been very satisfactory; while in the other there was no improvement whatever. In four cases out of six, therefore, the use of jambol had been followed by improvement, and in two it had proved a failure.

THE CHINESE TREATMENT OF LUMBAGO.—DR. F. A. CASTLE in a letter to the Medical News thus alludes to this novel method of treatment which he states is practiced in New York dispensaries:

"Apropos to the very interesting paper by THOMAS J. MAYS, M.D., on "The Analgesic Action of Theine," in the Medical News of the 17th inst., I would like to say that it is not infrequently possible to relieve cases of the character of some of those cited by hypodermatic injection of distilled water. Indeed, it is not always needful to inject anything—the simple puncture with a needle being quite sufficient.

"It has for many years been the practice in some of the public dispensaries of New York City to treat cases of lumbago, and other myalgias, by inserting deeply a needle such as ladies use to fasten their bonnets to their hair. I have known cases of severe lumbago to be cured almost instantly by this simple procedure (adopted from Chinese practice), and I am inclined to think that some of these cases reported to DR. MAYS might have been similarly relieved."

The physician may now "throw physic to the dogs" and, armed with "a needle such as ladies use to fasten their bonnets to their hair," go about jabbing patients with myalgia in the offending muscles and serenely collect his fee.

BELLADONNA INHALATIONS IN ACUTE BRONCHITIS.—MR. N. E. DAVIES says in regard to this subject: In acute bronchitis, I believe the dyspnœa is caused more by the contraction of the muscular tissue of the air-cells due to the irritation caused by the bronchial inflammation than by the viscid mucus secreted; and, acting on this belief in a case I had occasion to treat a few days ago, where the dyspnœa seemed likely to terminate life, I gave a grain of extract of belladonna in half an ounce of water, by means of a DR. SEIGEL'S inhaler. After the patient had inhaled this solution for a few minutes, the breathing became quiet and easy; and before the half-ounce was exhausted, the patient was asleep. By repeating this remedy every few hours, with a stimulating system of treatment by the mouth, the patient, an old lady aged 75, soon passed the dangerous stage, and is now recovering.

I have often used this method of treatment in asthma with magical effect, and can strongly recommend its trial in the early state of acute bronchitis, as I have found it marvelously successful. It has the advantage of the ordinary bronchitis-kettle, that it moistens the air of the sick-room, and administers a powerful remedy at the same time.—*Brit. Med. Jour.*, March 20, 1886; *Journal American Medical Association*, April 10, 1886.

CUBEB INHALATIONS IN DIPHTHERIA.—DR. R. COUETOUX, in the Bulletin Générale de Thérapeutique, reports two cases, age six and nine years respectively, of diphtheritic croup treated under very unfavorable circumstances, in a cottage with a dung-heap under the window, and containing only one fifteen-feet square room, in which the family lived. When death was apparently imminent, and tracheotomy had been refused, as a last resort he ordered inhalations of steam, tinctured with cubebs, of which twenty-five grammes were placed in the boiler at once, the steam being conveyed by tubes to the beds of the children to be inhaled by them. Both made a good recovery. DR. COUETOUX considers that cubebs is capable of being very easily employed in the form of vapors, and that used in this way against the diphtheria it is more powerful than eucalyptus, glycerin, tar, or the essence of terebinthine. However, he does not urge it to the exclusion of other remedies. In cases where it seems to be too irritating, the addition of glycerin might be advisable. The use of tonics, and rectal feeding when the stomach was rebellious, were also parts of the treatment.—*Phila. Medical Times*, May, 1886.

INHALATIONS IN PULMONARY TUBERCULOSIS.—RENZI presents the following results of numerous observations upon the treatment of pulmonary tuberculosis by medicated vapors:

1. Inhalations of minute quantities of the vapor of iodine, and of a mixture of iodoform and turpentine, induce amelioration of the local condition and of nutrition, but do not modify the fever, diarrhœa, or night-sweats. The mixture last named consists of twenty-five parts of turpentine to one of iodoform. Two to six drops of this are to be hourly volatilized in an apartment of average size.

2. Inhalations of sulphuretted hydrogen (four cubic inches of the gas to each cubic yard in the room) and of sulphurous acid augment the general and dynamo-metric strength of the patient, and have a beneficial effect upon nutrition and renal excretion. The sulphuretted hydrogen possesses an especial action upon the respiration, which, together with cough, is diminished in frequency.—*Rev. de Thérapeutique*, March 1, 1886.

RHUS AROMATICA IN THE TREATMENT OF ENURESIS.—Trials with the above drug have been confined chiefly to the treatment of children. For a child ten years of age ten or fifteen drops of a reliable fluid extract is usually prescribed, three or four times a day, say a dose after each meal and at bedtime, to be given in a little glycerin and water, or other suitable excipient. No special nicety need be observed in regard to dosage, as it is regarded as harmless if given in any quantity which an intelligent physician would be likely to prescribe. Rhus toxico-dendron is of no benefit in enuresis. The good effects of rhus aromatica are usually manifested quite promptly—frequently giving relief within the first two or three days. The doctor has also found the drug useful in the diarrhœas of both adults and children arising from intestinal indigestion.—*Archives of Pediatrics.*

DYSENTERY OF CHILDREN—ERGOT.—Twenty-one cases of dysentery in children, reported by DR. G. MAGRUDER, of Washington, were treated with fluid extract of ergot, five to twenty drops four or five times a day. Almost every case responded to treatment, and was either entirely relieved or much improved.

The Medical Age.

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Original Articles.

VOMITING IN PREGNANCY.

BY C. H. HOLLADAY, M. D., TINA, CARROLL CO., MO.

This is one of the most distressing symptoms of pregnancy. Occurring in the majority of cases in slight degree and during the early weeks of pregnancy, it sometimes becomes alarming in its force and frequency, and persists until late in pregnancy, and not unfrequently until term. And this notwithstanding the most energetic and persistent attempts to stop it; until the patient's health becomes seriously affected and her life even in danger. Naturally, owing to the gravity often assumed by these cases, the most searching investigations have been made into the causes of this trouble, and, as a result, very different opinions have been arrived at. Dr. Henry Bennett would have us believe that when at all severe, it is always associated with congestion and inflammation of the cervix uteri. Dr. Graily Hewitt tells us that it depends entirely on the flexion of the uterus producing irritation of the uterine nerves at the seat of flexion, and consequent sympathetic vomiting.

Another explanation is that the nausea and other sympathetic disturbances depend upon the stretching of the uterine fibres, by the growing ovum and irritation of the uterine nerves. But, in my opinion, none of these theories furnish a full explanation applicable to all cases. It is true that either of the above named conditions may intensify and render more persistent and at times, may cause the symptoms, but they are not the sole cause of their development. We may have nausea and vomiting without flexion and *vice versa*. Inflammation of the cervix is present only in a very small per cent. of the cases where vomiting exists. Distension of the uterine fibres may or may not be followed by nausea and vomiting. That the gastric disturbance depends upon nervous irritation, I entertain but little doubt, but I believe the irritation has its origin in the changes taking place in the corpus luteum of pregnancy, and that the changes taking place in the uterus tend only to increase the nervous irritation primarily set up and perpetuated by the physical changes going on in the ovary and its corpus luteum. In making this statement I am perfectly conscious of the fact that the idea set forth here is not in harmony with the teachings of the day, but, inasmuch as there is a great diversity of opinion among the different writers as to the cause of vomiting in pregnancy, I feel the more at liberty to express my views on this subject, and at the same time present what I believe to be an explanation of the cause of gastric disturbance in pregnancy in the majority of cases.

Now, in order that I may present this subject in a clear and intelligent manner, let us first view it from a physiological standpoint. At each menstrual epoch, the rupture of a Graafian follicle and the discharge of a mature egg occurs. A slight hemorrhage takes place about this time, and the interior of the Graafian follicle is soon filled with a coagulum. In a few days the serum separates from the coagulum proper, and is absorbed. The vesicular membrane also become thickened and convoluted, and tends partially to fill the cavity of the follicle. The follicle has now become completely solidified, and receives the name of corpus luteum. After the third week from the close of menstruation, if fecundation does not take place, the corpus luteum passes into a retrograde condition and soon disappears. Now if, on the other hand, fecundation does take place, we will have a marked variation in the changes taking place in the corpus luteum. This variation, however, is not marked until about the third week of pregnancy; but after that time the difference becomes very apparent. Instead of commencing to retrograde as the false corpus luteum does, the true corpus luteum continues its development until by the end of the fourth month of pregnancy, it usually attains to its full development, and forms a firm projection on the surface of the ovary, about one inch in length, and one-half inch in breadth. Ordinarily at this stage of gestation, a retrograde process begins to take place in the corpus luteum. The fat cells become absorbed and the capillaries disappear; cicatrization taking place about the third month after delivery. Occasionally we meet with exceptions to this rule. Sometimes the increased development of the corpus luteum does not begin to take place until an advanced stage of gestation; while in other cases the development commences early and continues throughout the entire period of gestation.

Having thus briefly indicated the changes

taking place in the false and true corpora lutea, let us now inquire how these changes influence the digestive functions, and what evidence we have, if any, that they are the chief factors in bringing about this distressing nausea. In pursuing our investigations of this subject we are at once struck with the fact that the appearance of the one corresponds exactly in point of time with the growth of the other. The nausea and vomiting appear about the fourth week in pregnancy, and in ordinary cases disappear about the fourth month. The increased growth of the true corpus luteum begins to take place about the third week after the close of menstruation, and progresses until about the fourth month, when it begins to retrograde, disappearing entirely about the third month after delivery. Thus it will be observed that the nausea and vomiting appear just at the time when the ovary is in a high state of irritation from the increased growth and development of its corpus luteum, and that as soon as the growth of this body ceases and begins to retrograde, these distressing symptoms promptly disappear. If from any cause the growth of the corpus luteum continues to an advanced stage of pregnancy, as it sometimes does, then we will have one of those persistent and aggravated cases of nausea and vomiting.

In proof of this fact I will cite a case that occurred in my practice some time ago. Mrs. S., æt. 20, primipara, had suffered greatly from morning sickness since the fourth week of her pregnancy, and was seven months advanced at the time of her death, which occurred from an overdose of morphine taken by mistake for quinine. On post mortem examination, the ovary was found to have been in a very irritable condition, and the corpus luteum in a high state of development, measuring one inch in length, one-half inch in depth and five-eight inch in breadth. Was this only a coincidence? So closely and with such regularity does the development of the gastric symptoms follow upon the increased growth and development of the corpus luteum, and the disappearance of these distressing symptoms correspond with the retrograde changes taking place in this body, that to say it was simply a coincidence does not, to my mind, furnish a satisfactory explanation of so wonderful a phenomenon. There are many other conditions which, if present, will intensify and perpetuate this symptom when once developed. Congestion and inflammation of the cervix uteri will, if present, tend to aggravate the symptom and render it more persistent. A flexion of the uterus producing irritation of the uterine nerves at the seat of flexion and thereby increasing the degree of reflex nervous irritation, is a complication occasionally met with. Temperament also exerts a wonderful influence in some cases, those of the nervous temperament suffering most. This is not owing to the presence in a greater degree of the exciting cause, but a greater susceptibility on the part of the nervous system to reflex action.

If either of the above conditions be present, they may complicate the case and render it more persistent than it otherwise would be, but they are to be regarded as complications only, and to be treated as such in the majority of cases, I believe.

To sum the whole matter up, I have come to the conclusion, as before stated, that the gastric trouble is sympathetic in its nature, and depends upon reflex nervous irritation; that this irritation has its origin in the ovary and is the result of the increased growth and develop ment of the true corpus luteum; and that in complicated cases in proportion to the degree of development to which the body attains and the length of time that elapses before its retrograde changes begin to take place, will be the prominence and duration of the annoying symptom.

RECENT PROGRESS IN DERMATOLOGY.

BY HENRY J. REYNOLDS, M. D.*

It is difficult, if not impossible, to determine in a year's time whether certain advances and discoveries in this department, as in other departments of medical science, are really such or only so called. It would not, however, be speaking in very flattering terms of the intelligence of the writers of the vast array of literature that is yearly presented to the medical profession, nor of those who eagerly peruse the same, were we to assume that even only a little in the direction of advancement had been presented; while, however, but comparatively little, perhaps, in this department has been presented during the past pear, that can in every respect be regarded as real advancement, very many clinical facts and experiences have nevertheless been presented, which, in addition to establishing new theories, serve the equally important purpose to show the fallacy of old ones. Therefore, not presuming to present all that has appeared on record in this light during the past year, I shall ask the indulgence of the society while I enumerate such as have come to my notice or been deemed worthy of mention, together with some personal remarks regarding the same, and leave the matter as regards the determination of the truthfulness and value of the so-called advances for further investigation and your wise judgment to decide.

He then referred to the grouping together of several rare conditions by DUHRING under the

* Professor of Dermatology in the College of Physicians and Surgeons, of Chicago. Annual address as Chairman of the Committee on Dermatology in the Illinois State Medical Society, which convened at Bloomington, May 18, 1886.

one general head of what he called dermatitis herpetiformis, and to certain other changes that had been recently made in the nomenclature of skin diseases.

He next, in his remarks on acne, spoke of the procedure recently proposed by SHERWELL, of Brooklyn, for that disease, viz: the passing of sounds in the male urethra; and cited the cases more recently reported by DENSLOW, of St. Paul, as corroborative of the beneficial results of this supplementary measure in the treatment of acne. For the deep or indurate form of this disease he spoke of the method which he himself usually adopted, and which he believed was original with himself. He always lances those apparently papular indurations deeply and invariably finds pus at the bottom, with a tendency to burrow still deeper, rather than to come to the surface. He then, to prevent the wound from healing over on the surface—which it is otherwise sure to do and leave the miniature subcutaneous abscess to go on as before, and remain indefinitely—passes a probe dipped in carbolic acid to the bottom and fills the whole incision from bottom to top with a small piece of absorbent cotton and leaves it to granulate from the bottom, which it will never fail to do, leaving only an almost invisible scar.

He referred to a suggestion made by FOX, of New York, as to the possible, if not probable, cure of leprosy, if the proper moral effect could be brought to bear upon these patients, stating that the moral effect was usually depressing in the extreme, banished as they usually are from society and imprisoned for life as it were with only the promise of a most miserable existence and a lingering death.

He referred briefly to the pigmentary syphilide and to a case reported by DR. R. W. TAYLOR, of New York, and one by himself of this condition.

He then cited the treatment suggested by BULKLEY for carbuncle, without incision and poultice, viz: an ointment containing ergot and oxide of zinc locally, and sulphide of calcium and saline laxative with iron internally. He also spoke of the treatment so highly recommended by DR. HIBBERD, of Richmond, Ind., of applying with friction every three hours oleate of morphine.

He then, in speaking of urticaria, said that LASSAR claimed to have reduced the frequency and cut short the duration of violent attacks of this disease by giving 24-grain doses of salicylate of sodium repeated every two hours until three doses had been taken.

In ringworm of the scalp ALDER SMITH recommended seven grains of chrysarobin to an ounce of chloroform, his theory being that the chloroform dissolved the sebaceous and fatty substances away and favored thereby, the penetration of the chrysarobin. A. H. HARRISON, he said, for this affection, applies a mixture of one-half a drachm of iodide of potassium to an ounce of liq. potassæ. When this has penetrated he applies a solution composed of three grains of bichloride of mercury to the ounce of sweet spirits of nitre, his theory is that the liq. potassæ softens the hair bulds and facilitates the penetration of the iodide of potassium. Then when the mercury mixture is applied the biniodide is formed at the bottom of the follicle, a chemical change which he claims to be very beneficial.

The writer then referred to the use of chrysarobin internally, so highly recommended by STOQUART a short time ago for various skin diseases. For theoretical reasons and from experience he did not believe the drug had any special value as an internal remedy: and even the original advocate did not, of late, claim so much for it as formerly.

Brief reference was then made to the use of cocaine in dermatological practice. He said he had found it to be of some service to allay itching in certain cases of eczema and in pruritis ani, in strong solution. He had used it to relieve the pain incident to the removal of superfluous hairs by electrolysis, but the remedy was not sufficiently absorbed by the skin as a rule to be very beneficial.

EARLY DIAGNOSIS OF PREGNANCY.*

BY E. S. M'KEE, CINCINNATI, OHIO.

[After calling attention to the numerous unreliable symptoms of early pregnancy, the author proceeded to discuss those which have latterly come to be regarded as tolerably trustworthy.]

Among the recently-considered signs was mentioned that of JACQUEMIER,—the slate or purple color of the vagina. Anything which impedes the circulation may cause this appearance. DR. JOSEPH TABER JOHNSON has made a good suggestion. He thinks the principle of the telephone could be used to hear much earlier than usual the feeble sounds of the fœtal circulation. DR. S. C. DUNN thinks he can diagnosticate pregnancy as early as the fourth week by the odor of the vernix caseosa upon the examining finger. DR. E. C. GEHRUNG was able to make the diagnosis by the fifth or sixth week by the sensation imparted upon touching the ovum with the sound. This is rightly condemned as dangerous practice, while it may be simulated by a polypus or other foreign body in the uterine cavity, and in the early weeks the ovum is attached only to parts of the uterine walls, and the sound may glide by it. PINARD and DIDSBURY have men-

*Read before the Section in Obstetrics and Diseases of Women and Children of the American Medical Association, May 5th, 1886.

tioned a gingivitis which begins about the second month. JERRISENNE, basing his observations on the law formulated by GRAVES that in hypertrophy of the heart the radial pulse remains the same whatever the position of the body, maintained that instead of the usual variation of from ten to twenty beats in the non-pregnant woman, the pulse of the impregnated woman remains the same. The essayist and others had investigated this symptom and found it quite unreliable. DR. H. D. FRY thinks that a rise in temperature of the axilla is a strong presumptive evidence of impregnation, provided there is no local disease. The author had found this true, but had found the rise of temperature in the vagina to be of less value.

To HEGAR of Freiburg we are indebted for the new sign of great promise which bears his name. This consists in an unusual resilience, compressibility, softness, bogginess, yielding and thinning of the lower uterine segment: that is, the section immediately above the insertion of the ligamenta sacro-uterina. The shape assumed is that of a fan, balloon, or jug. The change is most apparent in the median line. According to GEMPSA, the examination should be made as follows. The thumb is introduced into the vagina until it reaches the cervix, and the index finger into the rectum until it reaches the ligamenta sacro-uterina; the other hand is placed over the abdomen immediately above the symphysis, and pressed down towards the finger in the rectum. The rectal finger explores the cervix and the lower uterine segment in all its parts, and lastly the higher parts of the uterus. The examination is facilitated by pulling down the uterus with the vulsella and evacuating the bladder and rectum. The author thought this mode of examination thorough, yet repulsive to both patient and physician, as well as a difficult and hazardous procedure. He thought it quite possible in the majority of cases to make out all that is necessary with the finger in one of the culs-de-sac and the other hand externally. If this is not sufficient, it might be quite proper to make the examination as above described.

The bladder distended with urine and the uterus with menstrual blood may simulate HEGAR'S sign. These, however, can be easily excluded. Hyperplasia would show increased density; subinvolution would increase the longitudinal as well as the transverse diameter. In marked retroversion a careful examination per rectum is often necessary to find the sign.

DR. REINL, formerly assistant to HEGAR, says, "Among the twenty-two cases I missed this sign but twice, and found it earliest in the fifth week of pregnancy." DR. CAMPOS, present assistant to HEGAR, has reported six cases. DR. E. H. GRANDIN, of New York, reports eighteen cases, and says he can make the diagnosis prior to the eighth week by HEGAR'S sign alone. The author had a number of cases under observation, most of which had not yet had time to develop. One, a widow, acknowleged the opportunity and believed herself pregnant. Repeated examination failed to find HEGAR'S sign. and she was assured that she was not pregnant. After thirteen weeks the menses returned, and were normal in amount and duration. The other was a young wife, who, after a four months' absence from her husband, returned to him February 9. She soon came under the author's care, and her case required a digital and specular examination two or three times per week. Three times in the sixth week HEGAR'S sign was made out. March 31, forty-eight days after her return, she miscarried.

There remains to us, then, to lament again our inability in many cases to make a positive diagnosis of early pregnancy; to mourn the fallibility of many of the new and all of the old symptoms; to recommend especially the sign of HEGAR. which until now has proved itself impregnable; and to plead for investigation in a field which should not be "barren or unfruitful."

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated meeting, May 17, 1886.

The president, E. J. DOERING, M. D., in the chair.

DR. EDMUND ANDREWS exhibited a

NEW EVACUATOR FOR LITHOLAPAXY.

DR. ANDREWS said one serious defect of BIGELOW'S and THOMPSON'S evacuators is that the rubber bulb makes suction only for an instant instead of continuously, thus allowing fragments of stone which lie along the tube to be thrown back into the bladder when the bulb is compressed, thus irritating the bladder as well as causing it to be repeatedly expanded. To obviate these difficulties DR. ANDREWS has had constructed an evacuator in which the essential features consist in a double-chamber evacuating tube, straight or curved, the upper chamber being composed of thin metal 8⅓ millimeters in diameter, terminating in a round tip with fenestrum for evacuating, the under chamber being semi-cylindrical, fitting under the upper chamber so as to make the whole tube oval shaped, with a diameter of 31½ millimetres. To the under or inflow tube is attached a rubber tube three yards in length, with an inside diameter of one centimetre, to the outer end of which is fitted a metallic strainer large enough to admit without resistance all the water which flows through the tube. A bucketful of warm carbolized water, 1½ per cent., is

hung over the operating table high enough for the surface of the water to be forty-two inches above the pubis of the patient. When it is desired to wash out the bladder the evacuating tub is introduced with the fenestrum towards the patient's head and the tip of the tube pressing towards the rectum, thus making a hollow in the bladder into which the fragments fall. The strainer having been previously introduced into the warm carbolized solution and the rubber tube filled, this tube is attached to the inflow tube and the stop-cock turned. The water now enters the inflow tube and passes into the bladder through the small perforations with sufficient force to rapidly drive the fragments of stone through the fenestrum and out of the evacuator. The current is continuous and rapid; in a recent case of litholapaxy where the calculus was hard oxalate of lime an inch in diameter, the fragments were washed out in ten seconds. When the inflow tube is closed by a fragment of stone in the fenestrum, the operator simply presses on the last four inches of this tube, which is of rubber, and this dislodges the fragment. Dr. Andrews also called attention to a device for securing to any instrument filiform bougies by means of a split screw passing over the bougie scured by a nut, both fitting into the outer edge of the catheter.

Dr. W. T. Belfield opened the discussion by saying that the disadvantages of the ordinary evacuating apparatus mentioned by Dr. Andrews were well recognized, and that the apparatus exhibited seemed adapted to remove them. It possessed, however, one element of danger, namely, the possibility of undue distention of the bladder through sudden clogging of the exit tube. In cases of concentric hypertrophy where the bladder can contain only three or four ounces, the continuation of the powerful inflow might, if the exit were obstructed, cause serious damage. Of course if the clogging is immediately discovered, a prompt use of the stopcock would prevent injury.

As to the urethral instrument, he would wish to be sure that the filiform could not be detached beyond the stricture. This danger attaches, of course, to all methods of securing the filiform, but would seem to be especially great in the arrangement exhibited. The loss of a filiform in a tight stricture is an extremely uncomfortable accident; in several cases surgeons have even made external urethrotomy to recover it.

To Dr. Andrews' remark that in case of such an accident urethrotomy is readily avoided by inserting a small lithotrite into the bladder and seizing the filiform, Dr. Belfield replied that when there is present a stricture so tight as to require patient work to persuade a filiform to pass, a small lithrotrite could hardly enter the bladder unless reinforced by a sledge-hammer. If the urethra is everywhere large enough to admit a small lithotrite, there could be no danger of losing a filiform, because there would be no occasion to use one.

Dr. Fenn wished to know, if the momentum could be increased by increasing the specific gravity of the fluid, what would be the effect of a greater elevation of the reservoir?

Dr. Andrews said that the attachment of a flexible guide to the urethrotome is always a source of care lest it become detached. This was less liable to occur with this instrument than in the old way. In case it should happen, the lost guide could be seized and drawn down with a lithotrite.

The question of the pressure of the fluids and the strength of the bladder is one of great interest. But little is known about it. No more force should be used on a distended bladder, certainly, than a normal one could readily endure. We get the measure of this to some extent in the pressure of the expulsive power of the organ, which is a safe limit to keep inside of in the absence of other data. The pressure which Bigelow's evacuator ordinarily gives may form another guide, as this is known to be harmless. The reservoir must not be placed so high as to cause dangerous distension, should the outflow tube become obstructed. In practice forty inches had given all the current needed, and this was doubtless a safe pressure to use in any and all cases.

Dr. James I. Tucker read a paper on

UNDIAGNOSABLE MALADIES.

These cases generally are not recorded because there is so little about them that is tangible. They are perhaps functional derangements simulating organic diseases, sometimes these cases yielding readily to simple remedies, but are puzzling because so evanescent. At other times they are graver, often ending fatally and yielding no facts upon post-mortem examination which will aid in a correct diagnosis. But the list of undiagnosable ailments is rapidly decreasing, for example, Richard Bright, in 1827, explained that dropsical effusions are frequently due to diseases of the kidneys; Thomas Addison, in 1855, ascribed to disease of the suprarenal capsule the cause of a form of anæmia accompanied by a dingy discoloration of the skin. Until recently zoster frontalis was classified among skin diseases, but now with much accuracy it is traceable to disease of Gasser's ganglion. Dr. Tucker related a case in which a lady had been twice badly frightened and her nervous system had been severely prostrated. At intervals she was attacked with an epileptiform seizure, transient paralysis of the entire left half of the body, constriction of the larynx, a state of trance, and finally a trance-like state in which she had died. The patient's mother, after a

period of nervous disorder, had become a paraplegic, her father was temporarily insane, the oldest brother has an undefinable nervous disorder and a younger brother spasmodic asthma, while a sister has attacks of recurrent chorea major. In this peculiar group of nervous disorders what is the underlying cause? It is as yet unknown. This case illustrated the difficulty which hedges about the diagnostication of hundreds of cases of disease.

Dr. Pearson illustrated the difficulties physicians have to overcome in making a diagnosis by reason of the fact that they overlook some points in the history of a case, as in a case in which a patient had swallowed a piece of a metal spoon and it had lodged in the duodenum and blocked up the portal vein.

Dr. W. T. Belfield presented specimens of

ANCHYLOSTOMUM DUODENALE.

These had been referred to him for verification by Dr. R. W. Gelbach, of Mendota, Ill., who had discovered them in the intestines of young cats that had died of anæmia. Dr. Belfield confirmed Dr. Gelbach's identification of the worms, but for further verification sent them to Dr. Joseph Leidy, of Philadelphia, who replied he thought they were anchylostoma, although he had never seen authentic examples. Dr. Belfield said the anchylostoma are small nematode worms, about half an inch long, which inhabit the duodenums of men and cats, and probably of other animals. Discovered in 1838, their pathogenic significance was recognized by Griesinger in 1851, who found in them the cause of Egyptian chlorosis. They are veritable leeches which fasten themselves to the intestinal mucous membrane and suck the blood of their host. When present in large numbers they induce pernicious and fatal anæmia by exhausting the individual's blood. In tropical climates, particularly Egypt and Brazil, cases of pernicious anæmia or chlorosis produced by them are quite frequent; in Brazil such cases are quickly cured by administering the pulp of fresh figs, which destroys the worms. Quite recently anchylostoma have been searched for and found in patients dead of pernicious anæmia in Germany. So far as Dr. Belfield knew, Dr. Gelbach is the first to discover the worms in the Northern States of the Union. Their presence in cats makes it probable that they infest human beings also in this latitude. The possibility of this cause of pernicious anæmia should therefore be kept in mind, especially when other recognized causes—chronic nephritis, malaria, etc.,—cannot be detected.

Dr. E. Andrews asked if these worms were ever found in sufficient numbers to cause death, and he was answered affirmatively.

Dr. W. W. Jaggard exhibited the head of the *tænia mediocannellata* obtained in the practice of Dr. C. G. Smith. The following was the formula used:

℞ Chloroformi, ʒ i.
Oleores. filicis maris., ʒ i.
Ol. tiglii., gtt. i.
Aquæ camphoræ, ʒ ii.
Gum acaciæ q. s. ft. emuls.

SANITARY CONVENTION AT KALAMAZOO, MICH.

The Kalamazoo Sanitary Convention, under the auspices of the Michigan State Board of Health, held its sessions June 1 and 2, 1886. The State Board of Health was represented by Prof. Victor C. Vaughan, of Ann Arbor, Dr. John H. Kellogg, of Battle Creek, and Dr. Henry B. Baker, of Lansing.

After the address of welcome by the mayor of the city, Hon. Peyton Ranney, and the address by the President of the Convention, Hon. H. F. Severens, Dr. H. H. Schaberg, health officer of Kalamazoo township, read a paper on "Diseases of Poverty." The diseases incident to poverty include among their causes mal-nutrition, insufficient or improper clothing, and the bad hygiene of poorly built, unhealthy dwellings. The terrible results of deficient or improper nutrition are found in the infants of the poor. It virtually kills the child in many cases. How can an infant's weak organs assimilate the improper food thrust on it? The mother, weakened and harassed by lack of food, and prematurely broken down by overwork, is unable to give a child a good constitution. And when the natural food of the infant is supplemented by unfit food from other sources, its life is stopped by terrible suffering. Indigestible food causes many untimely deaths, killing more human beings than all other causes. Insufficient or improper clothing is also a great evil—too warm in summer, too cool in winter, causing the child to become stunted or dwarfed. Ignorance kills rich and poor. Poverty often debases by stunting the sensibilities, destroying the sense of cleanliness by close quarters and lack of means for cleanliness. Despair, discouragement, and surrender to these circumstances follow. Filth does not start a contagion, but it causes it to become more virulent and prolific. The physician in such cases has to battle against ignorance, obstinancy and resentment, where the case needs the most favoring circumstances. It has to be treated and checked where the family live, in one or two rooms, with no ventilation, over a poisoned cellar or soil that is a death-trap. The doctor cited a case in his practice, of obstinate disease that was finally overcome by simply moving the patient to wholesome air. He noted particularly one local cause of ill-health, in the practice of girls working in the

celery gardens in the late fall, doing themselves great mischief by keeping their hands in the cold water washing celery for market, sowing the seed for much future evil.

"Sanitary Regulations of the Hebrews" was the subject of a paper by RABBI IGNATZ MUELLER, of Kalamazoo. He showed the growth of interest in sanitary regulations to the present day, and emphasized the misery produced by ignorance. Hatred against the Jews had kept the knowledge of their sanitation from the world. Two principles stand out prominent in the Jewish regulations. The Hebrews insisted on cleanliness and temperance. Cleanliness was the first condition of health, and the discrimination between clean and unclean food was shown by the rabbi by frequent scriptural quotations. The regulations concerning food were supplemented by those concerning conjugal life and purity. Violations of marriage vows was punished with death. Sanitary activity extended over both public and private interests. The dead were decently buried though they were friendless. The principle of temperance was no less carefully observed. The Mosaic code did not favor asceticism or austere abstemiousness. The use of wine was allowed. It is an error that the Jews do not and did not use fermented wine on the feast of the Passover. Wine is not wine unless fermented. Hebrew and Greek passages were cited in proof of this. Indeed there would be no merit in the moderate use of that which cannot intoxicate. A Talmudic fable illustrated satan's use of wine and the abuse frequently made of wine. Intemperance was strictly forbidden by the Jewish code, and most impressive words are used against it as the source of crime and degeneration. The intemperate and gluttons were punished by being stoned to death publicly (Deut. 21:18-21). And this very thing had such an influence upon the Jews, that not only, as the Talmud says, was this law never enforced, but is it not true, even now-a-days, that one rarely finds any drunkards among Jews? Now you see a striking resemblance between our modern sanitary provisions and those prescribed by the Mosaic code. But we see, at the same time, while our modern sanitary regulations do not much interfere with the habits and manners of the individual life, the Mosaic law draws even these into the sphere of its codification, and regulates them without encroachment in the realm of individual freedom.

In the first evening session, MR. FRANK WELLS, of Lansing, Mich., read a paper on "History of Investigations Concerning Microorganisms, and the Germ Theory of Disease." Everything is filled with these minute beings. These spirits of the air are ever contending for an existence, the life germs and the death germs. The old theory that decay is a process of oxidation has given way to the new one that this process is caused by living organisms, which cause apples to decay, eggs to become addled, and yeast and other things to ferment. The paper described the long contest between the disciples of DARWIN and their opponents whether there was such a thing as spontaneous generation of life, or the apparent evidences of this were merely produced by organisms contained in the air and other mediums. The history of science, the speaker remarked, was a history of the overthrow of beliefs, and such was the fate of the theory of spontaneous generation. The struggle between these two theories passed through an eventful course. One young chemist, LOUIS PASTEUR, doubted the efficacy of the tests that had been relied on to prove spontaneous generation, and produced experiments that for a time settled the matter. A rival inclosed a wisp of hay in a receptacle filled with artificial air, the air having been submerged in mercury, which was assumed to cut off all traces of living organisms, and succeeded in showing the development of life in the hay after those close precautions. PASTEUR, however, reversed the conclusions of the demonstration by showing that mercury itself was a medium for carrying the organisms and must have supplied such to the hay. He then procurred air from different localities where the atmosphere was little laden with germs. Those which were freest were from up on the Jura and were taken from the stratum of a strong wind in the high atmosphere. With these specimens of air that were shown to be in most cases wholly free from organisms he showed that the union of air with putrescible liquids did not produce animalculæ. TYNDALL'S tests, showing that the clearing of air, by passing it through flame, demonstrated the materials in it to be organic matter, and his final and conclusive tests with test-tubes in an isolated chamber, putting an end to all further dispute, were also described.

The similarity of certain contagions to fermentation early led to a suspicion of the germ theory of disease. The paper described one of the earlier demonstrations in a particular class, the near annihilation of the silk-worm industry in France, and loss of $20,000,000 a year; the appeal to PASTEUR to investigate, and his almost instant discovery that the disease was caused by a minute organism, and the complete remedy he suggested in having the silk worms raised from eggs free from the infection. His experiments in identifying the cause of splenic fever in sheep and cattle, and chicken-cholera in fowls, and demonstration of a remedy in vaccination were also described. His experiments showed that the virus could be used to protect against itself, going so far as to silence all doubters. LISTER showed that bad results of surgical operations were due in great part to

microbes. Dr. Koch made the discovery that consumption was due to bacilli, which seized on people predisposed to it. The saliva and fluids of the alimentary canal furnish a medium for the disease germs. The cholera bacillus was soon afterwards discovered. The possibility of vaccination as a preventive was foreshadowed. Those organisms were found to be enormously productive, multiplying to the extent of 16,000,000 for 1 in twenty-four hours. The paper also described the more recent experiments of Pasteur on rabies; the inoculation of a rabbit by trepanning its brain and infecting it with the virus; then transmitting it from one rabbit to another through a long series till the virus was attenuated, and could safely be used for inoculation.

Prof. Victor C. Vaughan, M. D., Ph. D., member for the State Board of Health, delivered an address on Disinfection. It is the office of disinfection to destroy the germs described by Mr. Wells' paper. The difference between disinfection and antiseptic properties must be kept in mind, the agency of the latter being to retard decay. A common instance is the use of salt; another that of smoking meats to preserve them, the creosote of the smoke being the active agent. A disinfectant is a germicide and many of these germs can be killed if we can find out where they live. Germs multiply by a process of dividing themselves or through spores, analogous to seeds. Disinfectants are of two classes, as they destroy the germs themselves or their seeds. Fire is one of the best disinfectants. Steam is next to fire. When heated to the degree required for 25 pounds pressure it is very valuable and can be applied to articles through the medium of a tight box. It is impossible to disinfect a room while occupied by human beings. Among the common disinfectants a good one is corrosive sublimate, using two ounces of the solution, to a gallon of water. Chloride of lime, eight ounces of the solution to a gallon of water, is good, but does not want to be placed in a saucer; put a quart of it in the commode that receives the excreta. The burning of sulphur to purify a room, as after diphtheria, is effective. The room should be made tight. Use three pounds of sulphur to every 1,000 cubic feet of room space. The room can be opened and aired after twelve hours. Prof. Vaughan also dwelt on the means taken by physicians and nurses to prevent taking a contagion or carrying it in their clothing.

SECOND DAY.

"The Sanitary Aspects of the Proposed Straightening of the Kalamazoo River," by George S. Pierson, City Engineer of Kalamazoo, was purely of local interest.

"Healthy Homes," by Prof. Victor C. Vaughan, of Ann Arbor, was devoted mainly to the homes of the working classes, but the principles stated were of interest to all classes. A cottage may be as healthy as a palace, but it must stand on soil in which there is no animal and not much vegetable, matter. A house on damp ground breeds consumption. A layer of cement, impermeable by gases, should be placed beneath the floor. The cellar should have windows hung on hinges, kept open when practicable. Use no arsenical wall-paper. A good druggist can make the arsenic test at small expense. Make the floors of hard wood, and have tight joints. Rugs are preferable to carpets. Do not shut out the sun; faded carpets are not so bad as faded cheeks. Have the living rooms on the sunny side of the house. The kitchen is the most important room in the house; if it is filthy and unhealthy, all else is vain. It should have a window on two sides, and an independent ventilating shaft. Have both window sashes movable in all the rooms. Houses built without ventilation can be partially ventilated by a short board, setting under the lower sash, leaving a space where the sashes join. A room heated by a stove can have a good air supply brought into the room by a pipe, opening into a jacket around the stove. Ventilation can be had by a pipe leading from near the floor to the chimney, but a chimney should have one flue for smoke, and another for foul air. Water is a great source of disease. When a cistern is filled from the roof, it should be arranged so that the first washings of the roof in a storm can be turned off from the cistern. Build the cistern so that the soakage from the surrounding surface is impossible. With regard to the disposition of excreta, the professor preferred the dry-earth system, the accumulations being removed semi-monthly. It costs less than $5 a year, and does not admit of contamination. Garbage should be burned. Cess-pools should be water-tight, ventilated, and emptied once a month.

A paper on "Sanitary Condition of Public Buildings in Kalamazoo" was read by Dr. John H. Kellogg, of Battle Creek, member of State Board of Health. He had made a personal examination of the churches, jail and school buildings of Kalamazoo, in regard to their heating and ventilation. The paper was of general as well as of great local interest. Besides a description of the needs of the several buildings examined, he gave a good outline of the principles of heating and ventilation. He was followed by Dr. C. B. Cornell, on "Need of a Public Hospital in Kalamazoo."

In the last session of the convention there were three papers on "Personal Duty of the Citizen Touching the Prevention and Spreading of Communicable Disease." One from the standpoint of the lawyer, by Judge A. J. Mills; from the standpoint of the clergyman, by Rev. F. Z. Rossiter, of Kalamazoo; and from the standpoint of the health officer, by

Dr. Foster Pratt, of Kalamazoo. Judge Mills specified the several classes of laws relating to public health which it is the duty of the citizen to uphold, by co-operating with the health authorities. Rev. F. Z. Rossiter dwelt upon the peculiar traits of each of the dangerous communicable diseases. He took a model city which he called Fair View, and outlined objectionable conditions as well as desirable conditions in such a place.

Rev. R. E. Jones, of Kalamazoo, said if the public would not uphold the officers, the law could not be enforced. It is the duty of the citizens to uphold the officers, and of the officers to enforce the laws which they have sworn to enforce.

Dr. Foster Pratt, of Kalamazoo, asked attention to the fact that scarlet fever and diphtheria are dangerous and fatal diseases, causing deaths compared with which the deaths from small-pox are insignificant; yet that people do not fear them, shows that they do not understand the facts. Citizens should inform themselves on these subjects, and then they should co-operate with the officers of local, State, and national boards of health for the exclusion, prevention, and restriction of communicable diseases.

The president of the convention, Judge Severens, before the close of the session, said that the purpose of the convention had been noble. The statutes of the State in an early day on sanitary subjects were of no account, but of late a scheme had been developed which showed some good sound sense. These conventions are for the benefit of the people. The attendance had been light, but the publication of the papers would instruct and benefit many others. Great good, he thought, would be accomplished by the continuation of conventions of this kind.

Correspondence.

THAT "NEW" SKIN DISEASE.

I am so much in sympathy with Prof. J. E. Clark, M. D., in his trouble about "a new skin disease," that I am constrained to write forthwith, if, perchance, I may help him and his patients out. For that disease "*sometimes* called Michigan itch" is a terribly troublesome, persistent, and sometimes formidable disease. In fact, of all the ails that trouble this mortal life, that is least likely to voluntarily let go its grip.

It is most natural to treat of its history first. It may be a new disease about Detroit, but more than 25 years ago, when I landed in this new city of north-western Michigan, it had a very fast hold on very many people, and it had no respect of person, old and young, rich and poor, anti-democratic and democratic, Americans and foreigners, alike, shared in its luxurious scratchings, though it had a special penchant for the tender, thin skin of your ribs. And it had existed from time immemorial, the memory of the oldest inhabitant runneth not to the contrary; so here it is not reported as a "new disease." Indeed, a large percentage of my business here in early times was in the cure of this disease, and (the code aside) I gained quite a reputation, which has lasted to this day, as a curer of this "unclassified pathological condition."

Dr. Clark's description is sufficiently graphic to cover the symptomatology of the disease. That "itching came at night" is truly and pathetically so. Many a juvenile, after a few moments in a warm bed, would corroborate that, especially after a few introductory scratches. Then you may detect some significant symptoms among adults of both sexes. When you see a person grip his sleeve about the elbow, roll the arm under it, and plunge his fingers fleshward as though it was a luxury, you can infer what is the matter. Indeed, the act is pathognomonic.

I don't know whether the absence of the acarus and diffusion of the disease differentiate it from scabies, for I have never applied the microscope, but I imagine the term Michigan itch sufficiently identifies and differentiates the disease, and suggests the remedy, and the remedy that cures the old will surely cure the old-new disease.

I consider internal remedies of no value whatsoever. The remedy is sulphur.

My favorite formula is:

Lac. sulph., ℥ i to ℥ ij.
Camphor. pulv., ʒ i.

Suspend in a quart of water, and apply to entire affected surface by sopping with the hand at night. A few applications will abate itching, and persistent use will cure. I sometimes add to my other counsel to my patients: "It is no disgrace to have the itch, but it is to keep it," and so I stimulate them to be persistent in the use of the remedy; and so they are, when mortified by its significant and plain term. When it gets among a family of parents and children, it is no small affair to get it off the person, out of apparel and bed clothes, but persistence will surely prevail.

Diluted citrine ointment is effective, but I seldom use it now. Many years ago I prescribed it for a lady patient, who, ignorant of its true nature, had allowed the disease to spread over almost the entire surface. Disgusted with her situation when she knew it, she made a liberal anointing, and salivation resulted, but acarus or not, her malady was

effectively cured. She never complained of the salivation.

Both in reading and observation I have been astonished at the apparent ignorance of the character of this disease. A few years ago I saw a little girl who had hundreds of the little scabs, caused by scratching, especially around the legs. A physician of regular standing, and many years' experience, advised her to remove the scabs and touch each place with a sharpened stick of arg. nit. It was a herculean task and fruitless as well. Sulphur lotion cured her in a few days.

L. S. Ellis, M. D.

Manistee, Mich., 1886.

THE MEDICAL CONDITION OF SOUTHERN NEGROES.

Dr. Tipton writes from Selma (in the N. Y. Medical Journal) concerning the present physical condition of the former slaves. His mind is intolerant, resembling that of the former slaveholders; only now he wishes to make the best of matters. He makes the strange moral statement that the fine physique of the negro during slave times was due to strict discipline! the former masters even looking into what he should eat (a simple diet), leading an orderly life, etc.! in the same way that we take care of ourselves.

Since the war, and the unfortunate abolition of slavery, the negro lives and eats irregularly; disregards hygienic rules; half of the colored males have syphilis—hardly any specific treatment being given. The colored race is extremely dirty and immoral.

Before the war, we imagine the immorality was on the side of the whites.

Dr. T. thinks the colored race will gradually be extinguished, like the red Indians.

If the negroes only had money, the South would be a glorious field for our gynæcologists, as he says "nineteen out of twenty suffer from some form of uterine disease." We imagine this comes from hard work, especially in the fields; although New York ladies do not work in the fields.

Phthisis is very fatal among the colored. Before the war it was never fatal! The cause of this is the abolition of slavery! (p. 570, second column).

Yellow fever now kills the negroes as it does the whites; never in the time of slavery!

Mr. Lincoln's ghost should be visited by a medical delegation and informed of these fatal results of slave abolition.

The negro eats too much fat. That is bad for him. We presume his limited pocket-book accounts for this heinous sin.

Pneumonia. The slave-holders dispensed with the services of doctors in this disease, and gave the slaves butter-milk and pepper tea—all cured. The doctors killed them. We would like to import a few ex-slaveholders into New York, to show our doctors how to treat pneumonia.

The colored people are superstitious (never having received a university education); in this they resemble the Irish, who likewise are innocent of education. A few schools might do good, especially when they have to work hard all day and have no time to attend schools or universities. In this also they resemble the Irish, who are blamed because they are not educated.

The slave-holders gave them such an extensive course of education, especially in the higher branches, that they still believe in charms, hair, finger-nail parings, lizards, foot of a grave-yard rabbit, etc. The workings of these are then described. If a few missionaries went down among them, and taught them the gospel, perhaps lizards and grave-yard rabbits might be dispensed with.

Facial neuralgia.—They rub the cheeks with a cow's jaw bone.

Eye diseases.—A poor field for oculists, as the eyes are not used for fine work—especially when hoeing in the fields.

Gonorrhœa produces endometritis and barrenness in the race. This is a prime field for Lawson Tait. Many tubes await removal.

Midwives are in general demand—they are presumably cheaper than doctors.

Lacerations of the cervix are common. Pity they have no money.

Whisky is too much drunk!

Negroes suffer from exposure, they getting rheumatism, etc.

Meningitis and small-pox are fatal.

Excessive filth characterizes the poorer classes. This observation is original.

The following remarks might apply to Irish cabins: "Houses filthy, bedding filthy, no ventilation, no windows!" We presume the landlords do not put much money on glass, or on Queen Anne decorations.

"They sleep with their heads under the bedclothes." We presume they have not bedclothes sufficient.

Altogether, it is a very interesting production.

C. E. Nelson, M. D.

New York City.

A "NEW" SKIN DISEASE.

Upon opening the Age for May 25th, I was delighted to see an article, headed "A New Skin Disease."

Remembering the adage, "there is nothing new under the sun," the thought came to my mind, here is an exception, and at once I commenced reading it. I had not proceeded far,

when, *mirabile dictu*, an old friend was exhibited to my view. I read the article through, and was pleased to note that its author had given this "new disease" careful examination. So familiar did the subject appear, that in order that I could not be mistaken, I took from my library Vol. I of the Peninsular Journal of Medicine and Collateral Sciences, edited by E. ANDREWS, A. M., M. D., Ann Arbor, Mich., for 1853–4, and on page 506 was an article read before the Michigan State Medical Society, headed: "Psora Malaria, or Michigan Itch, by WM. BRODIE, M. D." I read this article carefully through, and so remarkable was the coincidence in the description of the "new disease," that I at once thought that the author and discoverer had read this paper. I knew this could not be, for the reason that it was almost impossible for him to do so, owing to the fact that unless he had consulted my library, he could not have well found the volume.

The adage that "there is nothing new under the sun," again proved itself correct, at least in this case. I may here say that both DUHRING and ZIEMSSEN describe the disease as "eczema papulosum."

The "new disease" is a troublesome one, but not dangerous to life, and DR. CLARK has done himself credit in bringing it again before the profession in the able manner he has.

A distinguished physician, upon being asked for a cure of rheumatism, replied, six weeks.

The cure for the "new disease" is warm weather and plenty of perspiration, and any remedies that will aid in bringing about "warm weather" and free action of the skin, will mitigate the symptoms and cure the "new disease."

WM. BRODIE, M. D.
64 LAFAYETTE AVE., DETROIT, MICH.

PEACH-ROOT TEA IN EPILEPSY.

I am sorry that the typographer of THE MEDICAL AGE made so small of my prescription of "peach-root tea."

Instead of an ounce of the bark of the root to a pint of water, he made it a scruple of water to the ounce of bark.

I did not think it very important to have the error corrected, until I received letters from physicians residing in three different States, touching the remedy. One wanted to know the proportions for preparing it; another had four or five cases of epilepsy, which had been treated with the bromides without success; and still another, who had several cases under treatment, on which he had tried nearly all known remedies, which had failed to cure, and wanted also to try the peach-root.

I submit it entirely to your good judgment to determine whether it is advisable, at this late date, to rectify the mistake. My article was published in the number of April 10th.

J. L. DORSET, M. D.
DORSET, VA.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

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Editorial.

SPECIAL SOCIETIES AND THE AMERICAN MEDICAL ASSOCIATION.

There are few things one finds it more pleasant to give, and few one is more backward in taking, than advice. This aphorism does not, of course, include the regulation professional advice of the physician, which is a something the pleasure in the giving and the appreciation of which, are largely conditioned on attendant pecuniary considerations. It is, however, an inalienable right of the American citizen to volunteer advice. Such as we may now have to offer may be as seed dropped by the wayside, but if it fail to bring forth fruit we cannot but feel that the responsibility of the failure will be chargeable to the soil.

We took occasion in commenting on the meeting of the American Laryngological Association in this city last year, to inveigh against the existence of special societies of its nature, and the proceedings of the late meeting of the American Medical Association, at St. Louis, serve but to give additional point to our moral. We think it must be one who deliberately closes his eyes to facts, who denies that the latter association has ceased to be as rich in its scientific features as it was up to, say a dozen years ago. Wherein lies the cause of the decadence? It is true many of the lights which then cast their effulgence throughout its halls have gone out forever, but there is no lack of illuminating power in the land. While there may be fewer great lights than formerly, there has been an increase of the lesser, and (to continue the metaphor) the illuminating power in this country is greater to-day than ever before. The evil (so far, at least, as the American Medical Association is concerned) lies in the fact that this power is no longer concentrated. Time was when this Association embraced all the talent of the profession, but it has come to pass, within the last decade, that those whose tastes and studies have combined to make them authorities in special departments, have hived off, and, as a consequence, we have national

associations of surgeons, gynæcologists, oculists, laryngologists, sanitarians, etc, whose membership is recruited from the American Medical Association. When a physician who may be a member of the latter, has attained a proficiency which gives him prominence in any particular department, and which makes him valuable to the general practitioners with whom he may have been meeting each year, he seeks, in most instances, to connect himself with the national association of specialists in that department. Experience has, moreover, shown that when he succeeds in making this connection his interest in the American Medical Association commences to decline. The result of this declension has been growing more and more apparent of late years. Papers of inherent merit in special departments have been growing fewer in the latter Association, and their places have been largely taken by efforts from the pens of general practitioners on clinical subjects, and with the withdrawal of the men of superior scientific attainments the Association has passed under the control of those whose tastes savor rather of those of the politician than those of the scientist.

It is clear from the above, the correctness of which will scarcely be questioned, that special societies can be fostered only at the expense of the American Medical Association. For this reason we believe they should be discouraged. It is essential to the growth of a proper professional sentiment in this country as well as for the greatest advancement of scientific medicine in the rank and file, that the profession should be a unit, and certainly the formation of many associations which are, in the nature of the case, rivals of the parent Association is not calculated to foster this unity. We should advise action looking to the return of all these separate associations to the American Medical Association, from which for various reasons they have branched off. Various reasons have been alleged why the meetings of this Association are not favorable to scientific work. None of them are of a nature which prevents their correction, and we do not believe that any very determined effort at this correction has ever been made.

OFFICERS OF THE INTERNATIONAL MEDICAL CONGRESS.

The following list of officers is the final selection for the International Medical Congress next year. It will be observed that it differs very materially from the original list, as published. The number of declinations from the original selections was an index of the prevalent dissatisfaction with the existing Executive Committee. It is believed that those whose names are now given forth are in full sympathy with the present Committee, and that there will be no vacancies other than such as may be caused by death, which, by-the-way, has already removed the first on the list of vice-presidents, Dr. Wm. O. Baldwin, of Alabama. In the selection of Presidents of Sections, it will be seen that due regard has at least been paid to the geographical position of the gentlemen:

President, Nathan S. Davis, of Chicago, Ill.

Vice-Presidents.—William O. Baldwin, Alabama; William Brodie, Michigan; W. W. Dawson, Ohio; E. M. Moore, New York; Tobias G. Richardson, Louisiana; Lewis A. Sayre, New York; J. M. Toner, Washington, D. C.; the President of the American Medical Association; the Surgeon-General of the U. S. Army; the Surgeon-General of the U. S. Navy; the Supervising Surgeon-General of the U. S. Marine Hospital Service.

Secretary-General.—John B. Hamilton, of Washington, D. C.

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XVII. Pathological Investigation and Nervous Diseases: John P. Gray, Utica, New York.

XVIII. Dental and Oral Surgery: Jonathan O. Taft, Cincinnati, Ohio.

ŒSIPUS REVIVED.

Lanolin, the newly discovered, or, rather, rediscovered, excipient, which is meeting with increasing favor with its increasing use, is, we are told by the Chemist and Druggist, described by CULPEPPER, the venerable "student in Physic," in his work published in 1650, as follows, under the name of œsipus: Take wool cut off from the neck, ribs, and under the pits of the forelegs of a sheep not washed, but well wearied, wash it well in warm water so long till it have left all its fatness in the water, then press it out and lay it by, let that fat and foul water be poured from on high out of one vessel into another a long time till it be froathy, then let the froath settle, and take off the fat that swims at the top, then pour the water to and fro again, till neither more fat nor froath appears, then wash the froath with the fat in clear water till it be cleansed from the dross and will not bite your tongue if you touch it with it; then keep in a thick earthen clean pot in a cold place.

Notes.

The Florida Medical and Surgical Journal says: "It was a source of regret to the older members of the Association (American Medical) to see the tendency to the introduction of political methods in the grand old organization. Time was when the vocation of medicine was held so sacred that scramble for office was unheard of among us. Men were thrust into positions of honor from merit alone, and the 'lobby' was unknown. We are sorry it is not so now."

DR. BROWN-SÉQUARD says that a "cold" usually results from the reflex influence of cold air upon the sensitive nerves of the nucha. He proposes to overcome the peculiar sensitiveness of these nerves by blowing with a pair of bellows upon the neck, using first warm air, which is to be gradually cooled until the patient can stand any sort of a draught (of air, not of liquid) without sneezing.

MR. ADDISON attempted three times to make a speech in the House of Commons, but each time came to a halt after uttering the words, "Mr. Speaker, I conceive ——" After the third essay a member arose and remarked that his friend had conceived three times, but as yet had brought forth nothing. It was a manifest case of false conception.

During the approaching heated spell it will require some strength of will to overcome the mental inertia of the profession, and without this strength the pages of medical journals will lack the attractiveness which is their wont. We would urge our readers not to knock under to the enervating heat. They owe to themselves and to their brethren to brace up.

Apropos of the Chicago doctor who snatched the man's aunt from the grave, is the following: "Have you heard how SMITH is?" "He was seriously ill until DR. BROWN was called in." "Then he is better now?" "No, he is dead."

"Is this a lying-in hospital, mister?" asked a tramp of the janitor. "Yes, this is a lying-in hospital." "Well, then, I guess it's the place for me, for I've been lying out these three nights."

The following memorandum was found in the diary of a young lady who had crossed the Atlantic: At eight o'clock in the evening I took a pill. At six o'clock in the morning I passed an ice-berg.

MAY: "Did you see that ambulance we just met?" CHOLLY: "Why, that was BROWN'S turn-out. What made you think it was an ambulance?" MAY: "Oh, I noticed a young man in it with his arm out of place."

Book Notices.

DISEASES OF THE DIGESTIVE ORGANS IN INFANCY AND CHILDHOOD, with Chapters on the Investigation of Disease, and on the General Management of Children. By Louis Starr, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Physician to the Children's Hospital, Philadelphia, etc. With colored plate and other illustrations.
Philadelphia: P. Blakiston, Son & Co.
Detroit: John MacFarlane.

It is not all of the practice of medicine to administer drugs, although such is the popular conception of the physician's function that unless a prescription be left for the patient, little faith is had in the efficacy of the advice. It takes years of acquaintance with the family physician and unbounded confidence in his ability and judgment, to enable the patient to rest satisfied with advice which does not embody an order for medicine. Doubtless, in the vast majority of the acute affections occurring in everyday practice nature is able, and better able, to restore the disturbed equilibrium under proper regimen than when regimen is neglected for the medicinal mixture. Herein lies the secret of the homœopath's success. His pellets suffice to satisfy the patient's desire for medicine, and without producing any other effect, allow the *vis medicatrix naturæ* to restore the equilibrium. The physician who has learned to respect and appreciate this force in nature, to regulate the general regimen and administer palatable preparations, has discovered one of

the essentials to successful practice. In his treatment of children he will find this fact emphasized in his daily experience.

Those who are disposed to concede the correctness of this statement will find in the book before us a work calculated to render them very valuable assistance. The author has given especial prominence to general regimen, holding it to be quite as important as the giving of drugs. The selection of suitable food, artificial digestion, the regulation of clothing, bathing and other elements of hygiene, to which too little space is devoted in most treatises on pædiatrics, are here intelligently and thoroughly discussed, and their importance properly insisted on. The reader must, moreover, be struck with the author's familiarity with the habits of children, and with the modification of these habits in disease. No physician can be successful in his treatment of children without making these a subject of careful study. Although the child cannot indicate in ordinary language the seat, intensity, and nature of his suffering, the susceptibility of his nervous system to impressions vests it with a power of mute expression wanting in the adult. It behooves the physician to learn this language. The author has evidently done so, and the faculty which he displays of assisting others to a knowledge thereof makes his book doubly attractive and valuable.

The part of the book devoted more especially to the medicinal treatment of children is, as far as we have had opportunity to examine it, quite up to the present stage of progression in this direction. We are especially pleased with the work as a whole, and regard it as an acquisition to the literature of pædiatrics, of which no one giving special attention to this department of medicine should fail to possess himself.

Diseases of the Spinal Cord. By Byron Bramwell, M. D., F. R. C. S. (Edin), Lecturer on the Principles and Practice of Medicine, and on Medical Diagnosis, in the Extra Academical School of Medicine, Edinburgh; Pathologist to the Edinburgh Royal Infirmary; Additional Examiner in Clinical Medicine in the University of Edinburgh, etc. Fifty-three colored plates and one hundred and two fine wood engraving. Second Edition.

Insanity and its Treatment. Lectures on the Treatment, Medicinal and Legal, of Insane Patients. By G. Fielding Blandford, M. D., Oxon., Fellow of the Royal College of Physicians in London; Late Lecturer on the Psychological Medicine at the School of St. George's Hospital, London. Third Edition, together with Types of Insanity, an Illustrated Guide in the Physical Diagnosis of Mental Disease. By Allen McLane Hamilton, M. D., one of the Consulting Physicians to the Insane Asylums of New York City, and the Hudson River State Hospital for the Insane, etc.

Hand-book of Practical Medicine. By Dr. Hermann Eichhorst, Professor of Special Pathology and Therapeutics, and Director of the University Medical Clinical in Zurich. Volume I. Di seases of the Circulatory and Respiratory Apparatus. One hundred and three wood engravings.

The Genuine Works of Hippocrates. Translated from the Greek, with a Preliminary Discourse and Annotations, by Francis Adams, LL. D., Surgeon. In two volumes. Vol. I.

The above four volumes are the January, February, March, and April numbers, respectively, of Wood's Library of Standard Medical Authors, for 1886. Inasmuch as the volumes are not sold separately, any extended notice of them severally is not demanded. The fact that the publishers have continued this library for another year argues that the profession are appreciative of their efforts to thus supply medical literature of unprecedented cheapness, and that the enterprise, contrary to what was prophesied with the appearance of the first numbers of the library, has proven a financial success. The titles of the volumes before us, with the names and positions of the authors, are a sufficient guarantee, if any be needed, that the high order of excellence established for this library by the volumes of previous years, has been maintained. In the mechanical execution there is nothing lacking, the only difference in the binding being in the color. We can only reiterate our oft-repeated advice to such of our readers who have not subscribed to this work, to avail themselves of this opportunity to provide themselves with the largest amount of first-class literature at the lowest price.

Formulary.

[From N. Y. Medical Journal.]

Iodide of Potassium in the Treatment of Diphtheria.—C. L. Stepp (Dtsch. med. Woch., 1886, No. 9; Bull. gén. de thérap., May 15, 1886), assuming that iodide of potassium, given in large doses frequently repeated, causes the fluids of the body to be permeated with iodine, and thus made unfit for the development of the micro-organisms of diphtheria, has treated a number of grave cases with the drug, so administered, and reports rapid cures. A child between one year and three years old should take every hour a soup-spoonful of a solution containing from two to four parts of the salt in a hundred parts of water. Older children will tolerate a solution of the strength of from four to ten per cent. Several of the little patients whose histories are given, took 150, 300, and even 750 grains of iodine during the course of the disease, without suffering from any toxical effects.

Oxalic Acid as an Emmenagogue.—M. V. Poulet (Gaz. hebdom. de méd. et de chir., May 14, 1886) reports a number of cases in which oxalic acid has been used for amenorrhœa from

various causes. He regards its effects as marvelous, including an amelioration of the pain in cases of dysmenorrhœa. He gives it according to the following formula:

Oxalic acid, 2 parts.
Warm water, 200 parts.
Syrup of bitter orange-peel, 60 parts.

A teaspoonful is to be taken every hour.

A Zinc Ointment for Varicose Ulcers.—Unna (Jour. de méd. de Paris, May 16, 1886) recommends the following combination:

Oxide of zinc, 2½ drachms.
Gelatin, 2½ drachms.
Glycerin, 1⅓ ounce.
Water, 1⅓ ounce.

Add the gelatin to three-fourths of the quantity of water and glycerin; when it is thoroughly dissolved add the oxide of zinc, previously mixed with the remainder of the glycerin. Apply on a piece of cloth.

An Antiseptic Gargle.—Müller (Schw. Woch. f. Pharm., xxiv, 1886) is credited with the following formulæ:

Thymol, 4 grains.
Benzoic acid, 45 grains.
Tincture of eucalyptus, 3 drachms.
Distilled water, 1½ pint.

Also:

Bichloride of mercury, 3½ grains.
Thymol, 3⅓ grains.
Distilled water, 1 pint.

The Action of Cascara Sagrada upon the Secretions of the Alimentary Tract.—Dr. Tschelzon (Ctrlbl. f. die gesammten Therapie, Aug., 1885), after a series of experimental studies, reaches the following conclusions: 1. Cascara sagrada is useless when prompt catharsis is desired. 2. Its purgative action is only obtained when the drug is introduced into the stomach; it has no action when injected beneath the skin or into the vessels, or when administered per rectum. 3. It does not increase the flow of saliva. 4. It causes an increased secretion of the gastric juice, the bile, and the pancreatic juice.

Morrhuol.—According to the Therapeutic Gazette, this substance, the active principle of cod-liver oil, was first isolated by Chapoteau. It appears in the form of crystals, having an aromatic odor, and a sharp, bitter taste. It is administered most conveniently in capsules, three drops representing a drachm of the oil. Morrhuol does not cause nausea, but rather improves the appetite. It is highly recommended in early tuberculosis, scrofula, and rickets.

Balsam Tolu in the Treatment of Diphtheria.—Dr. Lord (Brit. Med. Jour., December 12, 1885) speaks highly of the local use of this drug in diphtheria. He first removes from the affected parts as much of the secretion as possible with the blotting-paper, and then applies the balsam. Relief is said to be immediate, while the diphtheritic membrane disappears within two or three days after the commencement of the treatment.

Iodol in Surgery.—Dr. Mazzoni (Berlin. klin. Woch., Oct. 26, 1885) has used this new drug in over two hundred cases, especially in those of adenitis, abscess, and simple, indolent, and syphilitic ulcerations. Iodol is insoluble in water, but may be dissolved in alcohol and in glycerin, or used in the form of powder. Besides effecting a speedy cleansing of sloughing wounds, it has the property of causing the rapid development of healthy granulations.

An Aerated Solution of Iodide of Potassium, containing from two to five per cent. of carbonic acid, is recommended (Phar. Ctrlb., 1884; St. Petersb. med. Woch., May 13 (15), 1886) as having no notable taste. It is said that, provided water freed from organic matter by double distillation is used, the gas is held in solution unchanged for a long time.

Santonate of Calcium is preferred to santonin by E. Bombelon (Arch. d. Pharm., 1885; St. Petersb. med. Woch., May 13 [15] 1886) as a vermifuge. It is a tasteless powder, almost insoluble in water, and to these properties the author attributes the fact that it is more efficient than santonin and less apt to be expelled by vomiting. It should be neutral.

Medical Progress.

The Worthlessness of Quinine in continued Fever.—Not often does a prophet and a poet arise among us able to denounce our errors with rugged, Baptistic vigor, and to set our faces again toward the sunlight of medical truth. Such a prophet, however, has spoken in the Moberly District Medical Society, of Missouri, and his words come to us through the happy agency of the Keytsville Democratic Print. Dr. George M. Dewey therein portrays "The Utter Worthlessness of Sulphate of Quinine in the Treatment of Typhoid Fever," and that "bastard malady, born on the banks of the Chickahominy, whose untimely end is near at hand"

We have spoken lightly, but wish, in all sincerity, that every one could read Dr. Dewey's paper. It is not only logical, forcible, and sensible, but it is poetical and interesting—a rare combination from a doctor's pen. Dr. Dewey advances the view, first, that quinine is given too much:

"To-day sulphate of quinine is a therapeutic despot whose autocratic sway few have the

courage to dispute. At some time, in some stage of every malady, most doctors fancy they find an indication, an excuse for giving quinine. In high fever it will pull down; in low fever it will push up.

> "No pulse so high, no pulse so low,
> But down one's neck the stuff must go."

Taking up the special subject of typhoid fever, DR. DEWEY says: "I know of no disease in which quinine can do so little good and so much harm as in typhoid fever. I hear a great deal about tissue-waste from high fever. I doubt not that this is the tendency of long-continued high temperature. But the fact is, that a gallon of sweet milk will prevent more 'tissue waste' than an ounce of quinine."

The undue weight laid upon the symptom of fever since the introduction of the clinical thermometer is referred to:

"Utter neglect of temperature is far better for the patient than half-drachm doses of quinine. The quinine druggers raise a great howl about 'tissue-waste.' The fact is, tissue-waste and exhaustion come from impaired digestion, and not from temperature. That quinine does this, is beyond question."

DR. DEWEY is exceedingly severe upon DR. HUTCHINSON, the learned author of the article on typhoid fever in PEPPER'S "System of Medicine," who even in mild cases of this disease advises the use of two or three grains of quinine four times a day.

"Now," says DR. DEWEY, "here is a man, supposed to be the Polar Star to guide American practitioners over the doubtful sea of medicine, who writes down in a book (who dares dispute what he sees written in a book?) directions for giving quinine every three or four hours to a patient with typhoid fever, whom the veriest tyro knows needs nothing but good diet.

"The patient he describes is a good one to have. A good one to get up a reputation on—one who has no diarrhœa, no delirium, no tremors, temperature of 102°.

"A clear hundred per cent. of such cases ought to recover. Why would a thinking man give such a patient quinine? He says he was *accustomed* and in the *habit* of doing this way. This is at the bottom of such nonsensical practice.

"A doctor who contributes a hundred pages to a book to guide American practitioners ought to give some better reason than *custom* and *habit* for giving medicine.

"The doctors from the land of flowers and gunpowder tea give medicine for the same scientific reason this author does—from habit, custom, tradition. DR. I. HUN SU, of Pekin, China, treats uncomplicated typhoid fever very successfully with the following prescription:

℞ Three inches dried umbilical cord,
One fried snake-skin,
One fresh tom-cat's head.

Mix. Boil in five pints of water for two hours and strain. Sig.—Tablespoonful every four hours.

"This prescription would be far less apt to disorder the stomach and nervous system than quinine, besides being tonic."

DR. DEWEY next pays his respects to typho-malarial fever, so called. If his words are not gospel, they are very near it, and we shall only do justice to them and to our readers by quoting in full:

"During the late war the Yankees invented a new disease that howls and cries aloud for quinine. This bastard was baptised and christened 'Typho-Malarial Fever;' though DR. WOODWARD abandoned his bantling in disgust, every malarial maniac in the land is clamorous for its life.

> "Throughout the land the asses bray
> The horrors of malaria.

"I believe that no one claims to have any typical pathological lesions of typho-malarial fever differing from typhoid fever.

"In our last State meeting, DR. VAN EMON gave the histories of 15 post-mortems of deaths from the so-called typho-malarial fever. In every one the characteristic lesions of typhoid fever were found. If the affix—the tail, the malarial end—of this disease could be amputated, quinine would get its quietus from a good many doctors who only prescribe it on account of this caudal appendage.

"Some men are very contentious about characteristic lesions of typhoid fever. Pathology ought to settle it. If a patient has a continued fever, and any one symptom known to occur in what they call typical cases of typhoid fever is absent, this is a case of 'typho-malaria.' Should a case fail to have diarrhœa, or delirium, or tremors, or petechiæ, or tympanitis, or headache, or insomnia, or stupor, bronchitis, or hemorrhage, then it would be typho-malarial fever and absolutely require quinine.

"Hybrid diseases exist only in the brain of fools. I believe no one claims to tell the sex in bacilli.

> "Which is the Sire and which the Dam,
> Seems quite beyond the ken of man.

"I am told by the believers in the hybrid theory that this fever often commences as typho-malarial fever, and runs into or ends in typhoid fever. After malaria is killed by quinine typho lives on. Some men are bent on keeping this name alive to justify the treatment.

"Our forefathers fooled a long time with biliousness to justify calomel.

> "Hepatic doctors now are seen no more,
> The hunt for bile has long been given o'er;
> Whoever would a reputation make,
> Deserts the bile, the bugs to overtake,

"Whether one believes or disbelieves in typho-malarial fever is unimportant—quinine is a deleterious drug in either."

DR. DEWEY is the St. George of the dragon quinine We are inclined to think that in time he will succeed as thoroughly as did the legendary hero.

We have long contended against the routine use of quinine, or in fact any antipyretics in the continued fevers, and we trust that the echoes of the voice from Missouri may rumble about the world, to the perpetual benefit of febrile humanity —*N. Y. Medical Record*, May 22, 1882.

THE THERAPEUTIC VALUE OF MINERAL WATERS AND BATHS.—Few text books teach the physician the rôle in therapeutics of mineral waters and baths, though the subject is a most

important one. Some practical points bearing on this question may be gathered from the following article entitled Balneotherapeutics, which appeared in the British Medical Journal, May 8th, 1886:

The science of the treatment of diseased conditions, by means of one or other of the natural mineral waters, is evidently by no means a new one. The hygienic use of water, impregnated or not with gases or salts, was, indeed, probably far more appreciated, if not better understood, in the days of those over-cleanly people, the Romans, than in the time in which we live. In consequence, perhaps, of its venerable antiquity, the first step in the study of the therapeutics of "water-cures," consists in clearing away the quasi-superstitions and unnecessary obscurities with which centuries of interested circumlocutions have contrived to surround the subject; and having done this, we can proceed, free from prejudices and bias, to discuss the matter on its merits. Nothing, probably, has done more to discredit this branch of therapeutics than the fanciful phraseology of men, pleading for the most part *pro domo*, who, in their anxiety to give their claims an appearance of plausibility, employed a style and a nomenclature which deserve no better epithet than that recently applied to them, of "unscientific circumlocutions." Our still scanty knowledge of the physiological action of warm and cold water, of baths containing salts and gases, are, by them, carried far beyond the boundary of certain conclusions, and to the construction of what are often only haphazard theories. In the opinion of a great authority on the subject, the present position of balneotherapy is empirical, and is founded on the observation and experience of physicians. Hence, the only really valuable information has to be derived from a study of practical experiences of the therapeutical action of mineral waters, so far as they comprise the operation of the more important agents in "water-cures."

The curative agents in balneotherapy may be divided into the hydro-therapeutic, which refers to the action of cold baths, douches, etc.; the pharmaco-dynamic, as where gas- or salt-containing waters are drunk with a view to obtaining their specific effects; and the hygienic, this latter class comprising the change of air and scenery, absence of worry or professional cares, etc., which constitute a powerful factor in the beneficial results to be obtained from a sojourn in watering places. Apart from the latter consideration, there is no reason to suppose that a mineral water, systematically drank at home, is less efficacious than when drunk at the well under the eye of the bath physician.

While the value, under certain circumstances, of the outward application, in the form of baths of water containing gases or salts in solution, is generally admitted, such results are, in almost every case, to be attributed to the local and general effect of the water, aided or not by its temperature. It appears, from numerous and carefully conducted experiments, that neither salts nor gases ever permeate the skin sufficiently to produce an appreciable effect, and even the water itself is not absorbed to any noticeable extent. Any exception may, perhaps, be made in favor of waters containing iodine or sulphuretted hydrogen; although even here it is open to question, whether these substances do not enter the system through the lungs in consequence of their volatile nature.

By means of baths of different temperatures marked changes may be produced in the blood-pressure; the arteries of the pia mater, for example, contracting during immersion in a warm, and dilating in a cold bath. Further, if the body be placed in a cold bath, the volume of a limb not so immersed is distinctly increased. The general effect of a cold bath is to stimulate production of heat, and consequently metabolic changes; and this effect survives some time after the bath, if this be not unduly prolonged. On the other hand, both production of heat and elimination of carbonic acid are retarded by a warm bath, unless the duration or temperature of the latter be such as to lead to a rise of temperature. Further, after a warm bath, the rapid evaporation which takes place from the sodden skin, together with the lethargic state of the cutaneous vaso-motor system, renders the patient particularly liable to take cold, and special precautions are necessary to obviate this tendency. The abrupt changes in the circulation, produced by the external application of cold water, evidently point to caution in its use under circumstances where such variations might be attended with risk. The sensitiveness of the skin is dulled by prolonged immersion in warm baths; and this fact is turned to account in the treatment of skin diseases attended by pruritus, smarting, etc., temporary relief generally following the application.

The question of the electric action of metallurgic baths may be summarily dismissed as appertaining to that series of high-pitched assertions enveloped in pseudo-physical phrases, which form the basis of many modern books on balneotherapy, and even of some which lay claim to a high standard of physiological observation and accuracy.

The therapeutic effects to be hoped for from the ingurgitation of mineral waters require very careful consideration. To have any appreciable effect, however, such waters require to be taken in sufficiently large quantities, and no small importance attaches to the time and conditions under which it is administered. Many of the good results so obtained ought, in fairness, to be attributed to the substitution of a bland unirritating liquid for other and injurious drinks, together with the change in habits which is associated with a course of treatment. It must be remembered that the organism not only finds a certain quantity of water necessary in the twenty-four hours, but it also requires a certain degree of periodicity as to the time when it is swallowed. On this account, drinking-cures in which this periodicity is replaced by large draughts once a day, may not be without value, from their effect in quickening the blood-current and their more rapid elimination. Before treating of the thermal effects of water taken into the stomach, it will be well to remark that they are, generally speaking, contrary to those obtained by its outward application. One effect of cold drink is to bring about a lowering of the temperature of the body; the pulse-frequency is, moreover, diminished, while the blood-pressure is thereby temporarily increased. The popular idea, however, that water, so administered in large quantities is absorbed in the stomach, is probably

not altogether correct. Experiments tend to prove that as a matter of fact the specific gravity of the blood is not sensibly modified, even after copious libations; but the rapid excretion of superfluous water by the kidneys may to some extent account for this. We possess, probably, in copious water-drinking, especially if spread out so as to allow more perfect absorption, a means of subjecting the system to a powerful washing out, and possibly a coincident and temporary increased excretion of certain products of tissue-change. Indeed, a great number of water-cures owe their efficacy, in disease, far more to the diuretic and washing out effect of water drunk in increased quantity, than to the salts and gases dissolved in it. It is not alone the urinary secretion that is thus augmented, for, *pari passu*, with increased diuresis, the secretion of the parotid gland is stimulated, and the flow of bile is also increased, while its color is rendered lighter. Perspiration is more active, the intestinal juices are more abundant, and the peristaltic movements become more vigorous.

The curative action of certain alkaline springs in the treatment of gout and rheumatism, is sufficiently established to need no more than a passing remark. The tonic effect of a course of chalybeate waters, and the depurative action of the purely purgative waters, are also well known and appreciated. Although the composition of many of the waters belonging to this latter class has been approximately ascertained, their effect, when prepared artificially, is frequently not the same as when taken on the spot, although many of them admit perfectly of being transported in bottles without perceptible diminution of their active properties. The value of these waters, of which Friedrichshall is a type, in the treatment of constipation and the numerous ailments which follow in its train, is in a notable degree found to be attributable to the presence of chloride of sodium, together with other salts; but it is very probable that the conditions under which these salts are found in mineral waters, differ materially from the gross results as shown by analysis. This class of waters is that probably in most general use, and, with increased facilities for transport, their popularity must needs go on increasing. Their action is free from the doubt and uncertainty which characterize the results obtainable from waters of a more complicated composition, and containing substances as to the value of which, either here or elsewhere, much variety of opinion exists. France is particularly favored, as far as number and variety of springs is concerned; but Germany follows closely behind, and German waters are probably, better known in this country than the more expensive and often less highly mineralized waters of France. England possesses several springs of undoubted value. but. for some reason or other, they are less highly esteemed than water from foreign sources. If the subject can only be liberated from the tincture of charlatanism which prevades it, and placed once for all on the basis of experimental observation, there is every reason to hope that the use of mineral waters may be generalized in the treatment of those complaints to which they seem peculiarly applicable.

Whooping-Cough a Parasitic Disease. Fifty Cases Treated by Local Application of Solution of Resorcin.—Dr. Wm. H. Barlow, in the London Lancet, May 17th and 22d, presents an elaborate analysis of fifty cases of whooping-cough treated locally by resorcin. The results obtained have led Dr. Barlow to formulate the following conclusions, viz.:

1. That whooping-cough is to be classed among the diseases which are caused by the irritation excited by the presence of parasites.

2. That it is due to the presence of micrococci, which proliferate in large numbers upon the lining membrane of the larynx and pharynx, and which infiltrate the epithelial cells, which seem to be the preferential seat of their growth and increase.

3. That resorcin in a solution of the strength of one or two per cent., applied directly to the mucous surfaces concerned, has been found, in all cases in which it has been employed and the results watched, to rapidly reduce the number of chinks, to reduce their intensity, and finally lead to the cure of the disease. This last word "cure" is a bold one, but if the first and second propositions are held to be proven, then there can be little doubt that it is properly used. For if there are no other diseases *cured*, yet certainly those which are due to the irritation of a parasite are cured when that parasite is destroyed.

Lastly, the mode of application by means of a brush or swab is not the only mode in which it may be made; perhaps by some of the recently used instruments for applying medicated spray to the interior of the larynx and the adjacent parts of the throat (as that recently described by Dr. Miller, of Windsor, and by Dr. Hodgkinson) it may be applied yet more effectually than by the methods adopted by Prof. Moncorvo and myself. And, again, it is not finally proven that resorcin is the best application that may be found. Perhaps in its near congener, orcin, we may have a still better agent for this purpose, for we find in a note by J. J. Andeer, in the Gazetta Medica Italian-Lombardi, of July 4, 1885, that "Orcin possesses almost all the physical properties of resorcin; but while the latter is caustic in large doses, orcin is never more than astringent and antiseptic." This seems to point the way to further experiments, but meanwhile I ask my readers to put to the proof the facts I have placed before them, and to make from them the deductions to which they lead. To guard against misunderstanding, I wish to add that, while sharing to a very large degree in the opinions so strongly asserted by Prof. Moncorvo, I am not to be taken as denying that blood changes are an essential part of the pathology of this disease; nay, I am inclined to believe that some such changes are necessary to produce the peculiar pabulum for the parasitic germs, and that it is not improbable that some such change is a frequent result of attacks of measles and scarlatina, both of which evidently produce very marked effects upon the tracheal, bronchial, and pharyngeal lining.

The first applications are made by means of a large camel-hair pencil or a swab to the supra-glottic portion of the pharyngeal lining, to the opening of the glottis and the pharynx,

generally increase the violence of the chinks and their number; but that soon subsides, and in the course of one, two, or three days, the patients tolerate the application, and the chinks rapidly decrease in number. It should be applied at intervals of two hours, both night and day, unless the child sleeps, in which case it should not be disturbed. In his treatise DR. MONCORVO gives thirty cases, and of eighteen of these he gives complete details; and in a further account in the Archivio di Patologia Infantile, of Naples, for the months of May, July, and September, 1885. he gives a further series of forty cases; many of these were complicated with bronchitis and broncho-pneumonia, and many also were in children with strumous or syphilitic cachexia. In no case was the complication a cause of any difficulty in the treatment, a statement in marked contrast with the use of carbolic acid, or other of the parasiticide reagents which have been previously mentioned.

There were in these 50 cases, 19 males and 31 females, clearly showing the predominance of the disease in the female sex. The ages showed under six months 5 cases, under twelve months 5, under eighteen months 4, under two years 6, under three years ten, under four years 5, under five years 8, under six years four, and under seven years 3. The length of time under treatment is: Under two weeks, 2; under three weeks, 5; under four weeks, 11; under five weeks, 5; under six weeks, 8; under seven weeks, 10; under eight weeks, 2; under nine weeks, 3—total, 46, leaving 4 cases of which no account can be heard, but of which MR. MILLS, the assistant medical officer, reports that the probabilities are that they were cured: "I think you may say they are all cured; if they had died, I should have known about it." The total duration of disease is: Under two weeks, 1; under four weeks, 2; under five weeks, 8; under six weeks, 3; under seven weeks, 4; under eight weeks, 5; under nine weeks, 2; under ten weeks, 4; under eleven weeks, 3; under twelve weeks, 3; under seventeen weeks, 1; under twenty weeks, 1; under twenty-two weeks. 1; under twenty-three weeks, 1—total, 46. Thus the average length of treatment, of the 46 cases of which we have an accurate account, is five weeks and a half, within a fraction; while the total average duration of the disease is eight weeks and a half; but it is extremely likely that both these figures would be reduced by the inclusion of the four cases which we are unable to trace. DR. CHARLES WEST gives, from an observation of 25 cases, ten weeks as the average duration of the disease; but it is so extremely variable in its duration that this cannot be considered as otherwise than a very favorable calculation; and I am inclined to believe that the figures I have stated above show the effect of treatment, and that the true average is much higher than it is placed by DR. WEST.

DIFFERENT METHODS OF TREATING THE VOMITING OF PREGNANCY. — The question, how do you treat the vomiting of pregnancy? is frequently asked by one practitioner of another. Certainly if the physician has a theory of the etiology of the affection, he can readily give an answer as to its therapeutics; or he may, confessing his ignorance of its cause, mention the various remedies which his experience has taught him are the most successful.

In this country probably there is no eminent practitioner who holds with more tenacity to the uterine displacement theory of the affection than DR. HENRY F. CAMPBELL, of Georgia. In a very interesting paper presented by him at the last meeting of the American Gynecological Society, he used the following language: "Believing, as I do, that the gravid displacement is indeed the true source of all the observed histological alterations of the gravid uterus, and also that this gravid displacement is, as I have said, the *fons et origo* of the gravid nausea, I must urge as my first and last expedient for the relief of all these common evils, arising from a common cause, repeated postural pneumatic reduction in the genu-pectoral position."

Laying aside that which refers to "all the observed histological alterations in the gravid uterus" in this statement, as not pertinent to our present purpose, even if we understood the meaning of the author, we are content with the statement that the gastric disorder of pregnancy is caused by uterine displacement, and is cured by the patient lying upon her knees and chest while air is admitted into the vagina. In the paper several cases are narrated in which the author, acting upon his theory of the etiology of the disease, applied his method of treatment with the most satisfactory results. Now such facts are not to be set aside; the cause of the vomiting as well as its therapeutics, seem to be conclusively established in DR. CAMPBELL'S cases. But is it not going too far to assert that all cases of vomiting in pregnancy are to be similarly treated, and success will be equally certain? Most practitioners hold, and we believe justly, that there are many cases of vomiting in pregnancy in which there is no positional disorder of the uterus. DR. CAMPBELL has such confidence in his theory of the disease, he even believes that in "many of the cases treated by COPEMAN'S plan," the uterus was, "in some rough and violent way, accidentally elevated or replaced," and he attributes the recovery far more to this than to the dilatation.

In the course of his paper, DR. CAMPBELL justly criticises the incorrect representation and description given by SIMPSON, and HART and BARBOUR, of the genu-pectoral position, for with them the chest is not brought in contact with the plane upon which the knees are resting, and it is rather a knee-face, and not a knee-chest position. So, too, the weight of the argument is probably on DR. CAMPBELL'S side when he objects to a frozen section representing accurately that which is found in the living subject. But he fails entirely to answer the assertion made by HART in his Female Pelvic Anatomy, that bimanual examination made when the subject is in the genu-pectoral position proves "the retroverted unfixed uterus has not been anteverted, but is more retroverted." Until this assertion is disproved, we must be allowed not to entertain quite the same measure of faith in the genu-pectoral position which DR. CAMPBELL holds.

But we pass to another explanation of the vomiting of pregnancy. It is that of PROFESSOR TALMA, of Utrecht, and is given in the February number of the Révue Médico-Chirurgical des Maladies des Femmes. According

to it, the cause of the vomiting is cerebral anæmia, and the remedy is nitroglycerin; the medicine being given in alcoholic solution, or olive oil in capsules. One milligramme is administered daily, but in three doses.

The same journal also contains a reference to cases recently treated successfully by COPEMAN'S method. Hardly any one will hold many of these were cases in which the uterus was replaced, and the replacement, not the dilatation, cured, any more than he will believe that in the other cases just referred to nitroglycerine either replaced the uterus, or dilated the cervix. We find also recorded in the Révue, a case of violent vomiting in an unmarried woman 32 years old, the cause of the disorder being thought to be a round ulcer of the stomach; the patient was successfully treated by the use of the œsophageal tube for the introduction of liquid nourisnment into the stomach for three weeks, when she could again take food naturally without vomiting, and the unmistakable signs of pregnancy were present. At the beginning of the treatment she was greatly enfeebled, vomiting all aliment, her gums swollen and bleeding—indeed, she was almost in a state of collapse. A small quantity of milk was introduced by the tube once a day, and after the milk some cold water; in a few days the interval was shortened, and other food in addition to the milk, such as animal broths and oatmeal gruel, was given. Finally, we also find in the Révue a case of vomiting in pregnancy cured by ether spray to the epigastrum. Certainly this method of treatment is both simple and safe, and will, in some cases, be successful. It proves also useful in other farms of gastric irritability than in that occurring in pregnancy.—*Med. News*, April 24, 1886.

CHLORHYDRATE OF PEREIRINE IN MALARIAL FEVERS.—Pereirine is an alkaloid derived from the bark of a shrub belonging to the Apocynaceæ family, the Geissospermum laeve, a native of Brazil. The bark of this plant has a very bitter taste, and is frequently used in the treatment of malarial fevers, the patient being usually bathed in a a decoction of the bark.

The late Brazilian chemist, E. CORREIA, was the first to extract from the bark of the Paupereira, as it is commonly called in its native country, an active substance of an alkaloidal nature, which he called Pereirine. This substance has since been used by many Brazilian practitioners in a variety of affections with excellent results. DR. DOMINGOS FREIRE has succeeded in obtaining a combination of pereirine with the acids, and its use has been thereby greatly extended. The muriate and valerianate of pereirine are soluble, and chemically pure, in this respect being much superior to the alkaloid. I much prefer the muriate of pereirine, as it is very soluble in water, and have used it in many cases, always with marked success. Patients whose fever resisted the salts of quinine were promptly cured by the use of pereirine.

I have recently obtained a brilliant victory by the use of this salt. My patient was a woman, who for three months had suffered from a severe attack of malarial fever of an intermittent type. All the usual therapeutic agents had been employed without success. A change of climate had been tried without avail, the patient continuing to have the intermittent attacks.

On examination I found a marked enlargement of the spleen and liver, with jaundice and great emaciation. I prescribed chlorhydrate of pereirine in doses of two grammes (gr. 30), to be divided in four capsules, and taken four hours before the usual time for the beginning of the attack. This medicine was preceded by a dose of calomel.

As a result the patient had no attack on that day. But the following day the fever returned, no pereirine having been administered. On the following day another dose was administered as before, and on a few subsequent days gramme doses were given.

The malarial fever has not since appeared, and the patient is well. In many cases I have found this drug valuable, especially in the intermittent fevers, and the malarial fevers of children. When the salt is to be given to children, I usually prescribe it in syrup of orange peel.

We all meet with cases of malarial poisoning in Brazil which resist quinine and arsenical treatment. In these cases the use of chlorhydrate of pereirine will achieve a brilliant success, and the practitioner will loudly praise this invaluable drug, which must henceforth occupy an important place in the therapeutics of malaria.—*Dr. Clemente Ferreira, in Bull. Gén. de Therapeutique.*

INTERNAL ADMINISTRATION OF VASELINE.—In the British Medical Journal of May 1st, GEO. A HARRIS, M. R. C. S., L. R. C. P., discusses as follows the harmlessness of the internal administration of vaseline:

In the Journal for February 13th appears a short note, by MR. H. SHAPTER ROBINSON, on three cases of poisoning by peraffinum molle; and, in a concluding paragraph, it is queried "whether vaseline should be administered internally at all, and, if so, in what doses." The following facts show that vaseline can and has been used in India in large doses; and, although perhaps with very doubtful benefit, at all events without traceable harm.

During 1884, the district police-officer of Noakholi (a district of Eastern Bengal) reported to the local government that, having had a large number of cholera cases in his district, when away from proper medical aid, he had experimentally treated them with large doses of vaseline—teaspoonful doses, frequently repeated; and, having been surprised at the large percentage of recoveries, he had thought it his duty to report the matter, with a view to a further and extended trial. The local government took the matter up, and a circular was issued to all civil surgeons in Bengal, requesting a trial of vaseline in cholera. A similar circular was sent to the General Hospital, Calcutta. As second resident surgeon of that institution, all cholera cases admitted from amongst the shipping came under my care, and I gave the vaseline a fair trial—that is, it was given freely for upwards of three months, sometimes alone, and more often with an adjunct to other treatment. Most cases received drachm-doses of vaseline every hour, and some patients

had as much as three or four ounces of vaseline given from the time of admission to the time of death. Some of the vaseline was vomited, but a good part was retained, as, from its viscosity, it was difficult to throw up. I am very nearly positive that not one of the cases treated with these large doses of vaseline recovered, and also that, in my judgment, not the slightest benefit resulted from the treatment; yet, on the other hand, I cannot say that any positive harm resulted to the patients which could, in any way, be traced to the vaseline; there were no symptoms of irritant or narcotic poisoning, no extra vomiting or purging—in fact, the results of administration, as far as I could judge, were purely negative. I noticed that, after the first few doses, the majority of the patients evinced a decided reluctance to go on with the vaseline, objecting to its slimy taste. I do not know what the results of other medical officers were with vaseline; but, at the General Hospital, it was found to be completely inefficacious, and was abandoned—indeed, it is difficult to see how any benefit could result. I do not know whether KOCH'S comma-bacilli thrive in vaseline, or how they behave in that medium. The originator of the treatment has often assured me that he is positive the cases he treated in Noaknoli were true cases of cholera, with the usual symptoms of watery purging and vomiting, etc.; and that he never saw any harm result from the treatment. My own cases were mostly amongst Europeans, and were genuine cases of a very bad type.

ANTIPYRINE IN INFANTILE THERAPEUTICS.—The Journal of the American Medical Association in an editorial review of DR. MONCORVO'S brochure entitled "De L'Antipyrine dans la Thérapeutique Infantile," states the conclusions to be as follows:

1. On account of its remarkable activity, and its almost mathematical regularity of action, as well as on account of its absolute harmlessness in moderate doses, antipyrine is the most powerful and the least dangerous of the antipyretic agents employed to-day in infantile therapeutics. 2. When given in the course of specific or non-specific inflammatory affections of the respiratory apparatus the defervescence is, almost without exception, very rapid, more or less lasting, and causes at the same time an amelioration of the general state. In tuberculous subjects the continuous administration of this drug often causes a very favorable modification of general nutrition, on account of a reestablishment of appetite, the disappearance of insomnia, and at the same time a notable amelioration of the cough. 3. In the treatment of acute impaludism, antipyrine is very efficacious, contrary to what has been affirmed by almost all observers. Without any demonstrated action on the germs of malarial intoxication, it answers in benign and transient cases by its antithermic action and frank elimination through the skin. In severe cases it is of great service by facilitating a more prompt and more efficacious absorption of salts of quinine. It is thus a powerful adjuvant to quinine by preventing intermittences, so that the maximum temperatures are lower. 4. In the treatment of some cases of acute rheumatism, and in whatever concerns the febrile element in these cases, its action appears to be very analogous to that of salicylate of soda. 5. In several cases of surgical affections accompanied by a commencing septicæmia, antipyrine caused remarkable modifications of general nutrition by the subtraction of heat, which was very high in young children. 6. Defervescence caused by the drug is produced with mathematical regularity in children of every age, and varies from six to twenty-four hours. The succeeding ascent of temperature takes place in an insensible manner, contrary to what is seen when carbolic acid, kairine, and thalline are used. 7. It has already been said that no serious accidents have been caused by the drug in MONCORVO'S hands. 8. Antipyrine has a manifest action on the circulatory apparatus, slowing the heart and the pulse. Its influence on vascular tension has not been determined. The diminution in the frequency of the pulse and the lowering of the temperature are rarely ever proportional. 9. It has scarcely any appreciable modifying action on respiration. 10. The urinary secretion is somewhat diminished, but this is usually proportional to the abundance of the sweat. Some examinations have shown a decrease in the amount of urea. It does not cause albuminuria, and has been known to check it.

CREOSOTE A SPECIFIC FOR ERYSIPELAS.—What is a specific? It may be defined as a remedy, which by its mechanical or chemical properties destroys or neutralizes the exciting or primary cause of disease.

Time was, when the advocate of a specific was laughed at by the scientific world, but since it is known that so many forms of disease are the direct result of some kind of germ life, it is no longer a misnomer to call a medicine which will certainly, and always, destroy the germ which produces so many forms of disease, a specific.

In the light of this definition, founded upon the experience of forty years' successful practice in treating this form of disease, with creosote, the writer is prepared to endorse the heading of this article. Having used all the different remedies ordinarily prescribed, they have long since been laid aside, and this one used in all forms of the disease, exclusive, and with uniform success

In 1863 it was the writer's fortune to spend several weeks in a military hospital in Memphis, as a volunteer surgeon, under the direction of DR. LORD. In conversation with him, the use of this article was mentioned, which appeared new to him, and a case was put under treatment with it, with such prompt, favorable results, as to elicit his hearty commendation, and at his suggestion, SURGEON-GENERAL HAMMOND was informed of it.

All injuries, of whatever kind, have been treated with dressings of this remedy, and where this has been done from the first to last, in no instance has there been an attack of erysipelas.

The usual manner of application was in solution of six to twenty drops to the ounce of water, keeping the parts covered with clothes constantly wet with it. In ulcers or wounds it may be used in the form of a poultice, by stirring ground elm into the solution. The

strength to be regulated according to the virulence of the attack. Ordinarily, ten drops to the ounce is strong enough for the cutaneous form of the disease, and in dressings for wounds or recent injuries. If the inflammation threatens to spread rapidly, it should be increased to twenty or more drops to the ounce of water.

The antiseptic properties of this remedy render it of additional value, as it will certainly destroy the tendency to unhealthy suppuration, and thus prevent septicemia.

In the treatment of hundreds of cases of erysipelas, but a single fatal case has occurred, and that one in an old and depraved system. In the less violent attacks, no other remedy was used, but where constitutional treatment was indicated, the usual appropriate tonics were prescribed.

There is no question in my mind, but that creosote is as much a specific in erysipelas, as quinine is in intermittent, and may be used with as much confidence.—*St. Louis Med. Jour.*

Sal Alembroth — Sir Joseph Lister's Latest Antiseptic. — The Pharmaceutical Record gives the Canadian Pharmaceutical Journal as authority for Lister's latest views on antiseptics:

It may be news to a great many to learn that Lister has discarded the use of the spray almost entirely, the only cases he has used it in during the past fifteen months being operations involving the peritoneum. I have heard him say that of late he has become convinced that it was by no means to the antiseptic properties of the spray that the good results have followed. After careful examination and study he believes that the germicide properties in a solution of 1-40 carbolic, thrown by the spray into the air three or four feet, to be nil, or nearly so, and the sole benefit derived was due to the irrigation and absolute cleanliness induced. Carbolic acid was superceded by perchloride of mercury; this, when used for dressing, was, from its forming an insoluble albuminate of mercury, irritating and thus an unsatisfactory dressing. He now uses sal alembroth exclusively in his wards for dressings, and it has so far given very fine results. It is a double mercurial salt formed by the sublimation of a mixture of perchloride of mercury and chloride of ammonium, exceedingly soluble. The salt was known to the alchemist; it has not been used in medicine in modern times. Lister prepares his dressings now with a 1-100 solution of this, gauze cotton wool, lint, bandages, draw sheets, and where the wound is covered by the shirt, it is rendered septic by dipping it in the solution and drying before the fire. To make any of these dressings, all that is necessary is to soak them in this solution and dry. It not being volatile does not require to be kept sealed in tin cases. He also colors these dressings with an analine blue 1-10,000, the benefit to be derived from which is that wherever an alkaline discharge comes in contact with the dressing, the blue is removed and turned reddish, enabling you at once to see where the discharge has been, if the quantity was ever so small and had dried up before the dressing was removed. There is one precaution in using this dressing, and that is this: the dressing being dry and frequently handled might have some septic matter from bed clothes, hands, etc., so he always dips it in 1-2000 perchloride just before applying it. He is making a sal alembroth protective, which will be surcharged with the antiseptic so that as a discharge comes through a dressing it will come in contact with this protective and can be kept aseptic.

Metallo-Therapeutics. — Burke first made the interesting observation, that local anæsthesia, especially in those hysterical females who are inclined to trance and similar conditions, may at once yield to the local application of certain metals. That metal which in the individual case caused a momentary disappearance of the anæsthesia, or produced any irritation or change in sensation on local application, is then administered internally, and is apt to cure the anæsthesia permanently, if thus given The art thus to discover the metal indicated, is called Metalloscopy, while the treatment based upon it is understood by the name of Metallo-therapeutics. Prof. Engel, of this city, while reporting an interesting case thus treated, gave a full explanation of this branch of medicine in an article published in the Medical and Surgical Reporter about two years ago.

Dr. Moricourt (L'Union Méd. 14, '86) at the occasion of the meeting of the Academy of Science in Paris, reported the results of his investigations into Metallo-therapeutics. He has come to the following conclusions:

Some neuropathics suffer from local anæsthesia, which does not disappear on external application of metals. In such cases the return of sensibility may be achieved by the subcutaneous injections of certain mineral salts.

Individuals laboring under spontaneous lethargy, catalepsy or somnambulism, also such as may be hypnotized or mesmerized, react in nine cases out of ten on copper or gold, or on both. These metals bring back sensation in these cases.

To discover the metal most indicated in the case, and also the dose best suited and to be employed internally, pieces of metal are placed in rapid succession on the hand or forearm of the mesmerized person. The one producing most sensation of formication or the like is the one indicated. The dose for internal administration of the same metal must be the less, the more intense the sensation caused by the local application. In one patient a pill containing the sixth of a grain of oxide of copper caused vomiting and diarrhœa. For subcutaneous injections solutions of $\frac{1}{500}$ or $\frac{1}{1000}$, dose 5 to 10 minims, are employed. Citrate of iron and nitrate of silver are the metals most generally used for this purpose.

Treatment of Cold in the Head Based on its Neurotic Origin.—Dr. David Lee recently read before the Harveian Society, of which J. Hughlings Jackson is president, a paper on the "Neurotic Treatment of Catarrh." He considers the diaphoretic treatment of catarrh as entirely opposed to the pathological condition, which is a neurosis in which the vaso-motor system is very largely concerned.

An impression of cold from draughts, insufficient clothing, or wet clothing, makes a impression on the surface of the body or the cutaneous-nerves which is by them transmitted to the nerve-centres. The effect is not immediately manifested, but after a few hours chilliness of the surface is experienced, clearly due to a general vaso-motor spasm of the cutaneous vessels, and accompanied by flying pains and aches in the limbs which are probably really central and not peripheral, and due to disturbed vascular conditions of the nerve-centres themselves. The doctor after describing the territories which the vaso-motor spasm thus invades, goes on to outline his treatment, the indications being to soothe the reflex disturbance of the central nervous system, to quiet the local congestion and hyperæsthesia of the nasal mucous membrane, and to arrest the flux if it has already commenced. To completely win the confidence of the learned body before whom he read his paper, he tells what he does for himself when he has a cold. He takes 40 to 60 grains of bromide of potassium, repeating the dose in six hours, and if necessary repeating it again after the same interval has elapsed. He paints the nasal mucous membrane, especially of the inferior turbinated bones, with a four-per-cent. solution of hydrochlorate of cocaine by means of a camel's-hair brush; and for the flux he uses 15 minims of the tincture of belladonna in a little water every hour or two, until his throat feels somewhat dry. He says: "Since I have hit upon this plan I have never failed rapidly to arrest my own catarrhs, nor have I failed in any instance in which I have myself been able to superintend the administration of the remedies."

In the discussion which followed the reading of this paper the learned members defended diaphoretics, one because experience had proved that they had been of use; another made a plea for the time-honored theory of a chilled exterior and an overheated interior of the body; while still another thought "diaphoretic treatment most in accord with the natural process of cure."

The contagiousness of colds was also discussed, but, unfortunately, our English brothers did not throw any light on this question, which is evidently often asked to vex the practitioner on the other side of the Atlantic as well as this. *Med. Record*, April 24, 1886.

Russian Diuretics.—The Russians have great faith in diuretics, and therefore many drugs of of this class are popular as household remedies. Some of these, such as fox-glove, were in use amongst the peasants long before they were admitted into the category of even extra-pharmacopœial remedies prescribed by professional men. Dr. S. A. Popoff has recently made some researches on the action of certain household diuretics, communicating his results to the recent congress of Russian doctors. Cloud-berries (rubus chamæmorus) are almost unknown in scientific medicine, though a paper on their diuretic quality was written in 1856 in German by Dr. Trinkovski, who recommended them in hydrocephalus. Dr. Popoff prepared infusions, decoctions, and tinctures, and also an acid which he believes to be the active principle, and found, by experiments on animals, that considerable increase in the urinary secretion was produced by the administration of any of the preparations by the mouth, under the skin, or into the veins. This occurred also when the spinal cord and the splanchnics were divided, and when the animal was under the influence of curare. There was no alteration in the blood-pressure, and but slight palpitation of the heart. The only cases in which any slowing of the heart occurred were those in which a solution of the acid was introduced directly into the jugular. Nikanoroff's experiment of causing defibrinated blood to circulate through the kidney, first alone and then containing the acid in solution, was tried, and the amount of blood flowing out of the renal veins determined, but no positive results were thus obtained. The author has no doubt that cloud-berry acts by directly stimulating the renal tissue without acting on the heart or circulatory system. It has thus, he says, an effect similar to that of antihydropin (tincture of black-beetles), which is well-known in Russia and prescribed frequently, but this latter has the more powerful action of the two.—*Med. and Surg. Reporter*, May 15, 1886.

Gavage in the Treatment of Consumption.—Débove (Centralblatt für die Med. Wissenschaft) and other French writers have during the last few years repeatedly commended superalimentation in the treatment of phthisical patients. In spite of the absence of appetite, the patients were obliged to take, by means of the œsophageal tube, large quatities of a mixture of milk, eggs, and so-called meat-powder (meat cut up small, dried over a fire, and powdered in a mortar), with the occasional addition of peptones and cod-liver oil. Dr. Peiper (Deutsches Archiv f. Klin. Med., xxxvii.) has repeatedly tried the method ni Mosler's clinic. In two cases the œsophageal sound was discontinued at the solicitation of the patients, however, and they were allowed to take their food in a natural manner. At the onset, half a litre (one pint) of lukewarm milk or bouillon was given with 25 grains of meat-powder, several eggs were added, and this quantity given twice daily; subsequently the milk and meat-powder were greatly increased, and given four times a day. With this the patients continued their regular diet, which was chiefly vegetable, with usually one bottle of wine daily; cod-liver oil and stomachics were given when required. Fourteen patients were treated in this way, with the following result: in two the condition became worse during the treatment; in the remainder, on the contrary, after a short time a marked improvement in their general condition was observed; strength and bodily weight increased, they were able to leave their beds, the appetite improved, attendant diarrhœa was checked, cough and vomiting very much reduced. Bacilli were not detected in the majority of cases, however. The excretion of urea was greatly increased, sweating was less, and in two the hectic fever was favorably influenced.—*Philadelphia Medical Times.*

The Anodyne Properties of Piscidia Erythrina (Jamaica Dogwood).—Ferd.

ADALB. JUNKER, M. D., in the London Medical Record, May 17, 1886, after commenting on the physiological action of Jamaica dogwood, pays a tribute to the value of this anodyne in neuralgia.

Until quite recently, piscidia has been considered as a hypnotic. Experience leads the author to the opinion that it principally acts as an anodyne, and that sleep is not its specific immediate effect, but only rendered possible in consequence of the cessation of pain.

HAMILTON'S first trial in 1844 perfectly confirms this view. He suffered from violent toothache, which nothing would allay. After applying the tincture of piscidia on cotton-wool to the tooth, marked relief took place. This induced him to take internally a few drops of the tincture, after which the pain perfectly ceased and profound sleep ensued.

The preparations of piscidia prove beneficial principally in neuralgia, and the author rapidly cured several cases of obstinate brachial or facial neuralgia. He prescribes exclusively the Jamaica piscidia, which, of all other kinds, is the most active; and uses the tincture, of which he gives 30 to 40 minims a day. Of the American fluid extracts, and those prepared by LIMOUSIN, in France, 3 to 4 grammes (46 to 60 grains) a day may be taken either pure or in a mixture.

THE USE OF MALT LIQUORS IN FUNCTIONAL DISTURBANCE OF THE HEART.—DR. CHARLTON R. GULICK sends us an account of the case of a man who, after an attack of measles, had acute lobar pneumonia, for which he was not treated. This in turn was followed by severe bronchitis, and DR. GULICK was called in. The patient did well under treatment; little if any pleuritic thickening was left, and no organic disease of the heart was to be discovered, but he began to suffer with palpitation of great severity and persistence, which proved very refractory to treatment. Electricity was first used, then quinine, and then digitalis. The use of the drugs was pushed to the fullest extent, and finally DUQUESNEL'S digitalin was used hypodermically, but this proved exceedingly objectionable to the patient, and lager beer was ordered. Within seventy-two hours marked improvement was observed. At first the improvement was imputed to the use of the drugs, but the question was tested by withholding the beer and continuing the use of the medicines. Within three days the palpitation returned with all its original severity, but was again removed, never to return, by suspending all medication except the use of beer. There was no gastric disorder in the case. DR. GULICK commends the use of lager beer in rebellious cases of functional derangement of the heart.—*N. Y. Med. Jour.*, May 22, 1886.

COCAINE TO DIMINISH LABOR PAINS.—At the meeting of the Association of German Physicians in Prague on April 8, 1886, FISCHEL presented the record of five cases in which local applications of cocaine were used to diminish the pains of labor. He quoted the brilliant results obiained by DOLERIS, in whose observations the drug was applied to the vaginal mucosa and the external genitals in aqueous solution, or in the form of a salve, the strength in either case being four per cent. The amount used was from forty to sixty drops of the solution and forty-five to sixty grains of the salve. In this manner DOLERIS induced practically painless delivery in thirteen out of of fifteen primiparæ.

FISCHEL'S results were less striking. Employing, as a rule, weaker cocaine solutions, he records one case of absolutely painless delivery, two in which the pain was greatly diminished by the application, and two in which the results were negative.

These observations, apart from the practical interest, tend to show that the seat of the labor "pains" is not in the uterus, but in the dilating cervix and the vagina.—*Wiener medicinische Presse*, April 25, 1886.

BORAX AS A REMEDY FOR EPILEPSY.—This is the subject of a paper by CHARLES F. FOLSOM, of Boston, in the Boston Medical and Surgical Journal. He publishes some of the details of two cases, and says the only annoyance from the use of borax in doses of ten to fifteen (or more) grains three times a day is a dry, scaly eruption, giving rise to a great deal of itching, but which disappeared after several weeks' use of arsenic internally and oxide of zinc ointment with vaseline externally. Aromatic tinctures given with it prevent nausea, which immediately follows its administration in cold water. The first few doses of borax may cause diarrhœa, which soon ceases. He had seen a number of cases of marked improvement from the use of borax after the bromides had failed to do much good, and, also, many where the alternate use of the two drugs, each for several months, was attended with excellent results. It is best taken an hour and a half after meals.—*American Druggist*, May, 1886.

THE TREATMENT OF IVY POISONING.—DR. AUGUSTINE BROWN calls attention to a specific remedy for ivy poisoning which he described eight years ago in the Medical Record. This remedy is bromine, which DR. BROWN has employed with unvarying success in seventy-five cases, using the following formula:

℞ Brominii., gtt. x–xx.
Ol. olivæ seu
Ol. amygdalæ dulc., f ʒ j.

M. Sig.—Apply freely to affected surface four times daily. Wash with warm water and castile soap twice daily.

CHLORAL AS A VESICANT.—Hydrate of chloral has, according to the London Medical Record, been successfully employed instead of cantharides for blisters. For this purpose powdered chloral is sprinkled on previously slightly warmed adhesive plaster. Vesicles are raised by it in about ten minutes. The advantages of this blister over other kinds are rapid and perfectly painless action, and absence of any of the troublesome effects sometimes caused by cantharides.

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CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, June 7, 1886.

The President, E. J. DOERING, M. D., in the chair.

DR. A. REEVES JACKSON read a paper entitled

THE INTRA-UTERINE STEM IN THE TREATMENT OF FLEXIONS,

exhibiting the stems used.

The essayist began treating uterine flexions with the stem pessary in 1870. Prior to that time the only methods he had employed were gradual dilatation and incisions. The results were so unsatisfactory that he sought for a safer and more successful method. Having received the impression that the use of the stem pessary was more hazardous than either the dilating or cutting plans, he commenced its employment with misgiving, and did not rely wholly upon it, but preceded it with either gradual stretching or slight incisions. In two cases this mixed method was followed by pelvic abscess, a sequence which he had never observed when the stem alone had been used. All cases of uterine flexion are not accompanied by dysmenorrhœa or sterility, yet when there exists a relationship between these symptoms and an existing flexion, the latter must be looked upon as a mischievous factor and one that should be removed. He had never treated any case of flexion in which dysmenorrhœa was not present, although coexistent barrenness has been frequently an additional incentive to the patient to undergo efforts at cure.

He preferred CHAMBERS' bifurcated vulcanite instrument, although the divergence of the branches below the internal os uteri was a radical defect in the instrument as ordinarily used. Frequently the branches should be closed so that the stem might be practically single in that portion which traverses the cervix. His method is as follows: A flexion and its direction being diagnosticated, a flexible bougie is passed through the bent portion of the canal and quite to the fundus. The depth of the canal being carefully noted, a pliable stem, consisting of the distal portion of the same, or a similar bougie, one third of an inch shorter than the ascertained depth of the canal, is selected for introduction. A flange or bulb is formed upon the outer end of the stem by rolling upon it a section of rubber tubing. The woman being placed on the back in SIMON'S position and the os uteri exposed with a speculum, the stem, either grasped with a dressing forceps or mounted upon the end of a piece of pointed wire, is passed entire into the uterus. A large tampon of cotton moistened with slightly alumized glycerin is pressed against the bulb of the stem, and allowed to remain one or two days. The tampon is removed and replaced at suitable intervals until the tendency of the stem to leave its position disappears. After this yielding stem has remained from one to three weeks, according to the degree of tolerance manifested by the uterus, it is removed and a thicker one put in its place. This likewise is permitted to remain a week or two, and is then replaced by a CHAMBERS' stem. While not very much, or, indeed, any change of shape is to be expected in consequence of the use of the flexible stem, yet, in several instances, a very considerable alteration took place within a few weeks, or even a few days, and in a few cases it was found unnecessary to resort to a rigid instrument at all. Usually, however, it had been necessary to use an inflexible instrument for from three months to a year—not continuously, but for periods of three or four months, with an interval of a week or two, during which the stem was removed in order to test the degree and permanence of the improvement. The feature of this treatment which is essential to its safety and success, is its slow and gradual conduct, and the non-observance of this necessity has been the cause of dangerous results and failures to cure.

The drawbacks attending this method of treatment were: 1. Difficulty in retaining the instrument in position. 2. Pain. 3. Hæmorrhage. 4. Pelvic inflammation—all except the first being common to all other methods of treatment. A table comprising the details of sixty-four cases treated by the intra-uterine stem alone was given, showing the ages and social conditions of the patients, the direction of the flexion and the result of the treatment. Of the entire number 42 occurred in married and 21 in single women. Of the former 8 had borne children; the other 34 were sterile. Of the latter 8 subsequently bore children. A cure of the flexion followed in 40; of the remain-

ing 24 four were improved and relieved of dysmenorrhœa. In 20 the result was unknown. The ages of the patients ranged from 19 to 39 years. The uterus was anteflexed in 50 and retroflexed in 14.

In conclusion the author said: "I believe the principle of the intra-uterine stem in the treatment of flexions to be correct; and it need not be dangerous—at least, no more dangerous than any other effective method. I further believe that by its use more cases of uterine flexion can be cured than by any other means at present in vogue. The conditions of both safety and success are watchfulness, patience, and slow progress."

Dr. D. T. Nelson, in opening the discussion said: Mr. President, I am glad to have heard the paper, and think it is a most valuable one. The cautions that it gives are certainly those that all of us should remember, to wit: the length of the instrument used compared with the length of the uterus, the slow and gradual dilatation of the uterus before using the inflexible stem, and removing it on the occurrence of bad symptoms. In recent years I have not been in the habit of using the stem pessary as much as my friend Dr. Jackson, but I think that with his present instructions, I shall try it again. Not that I have not tried gradual dilatation, and the gradual, slow, careful straightening of the uterus, but I have not by this particular means caused the pessary to be retained as constantly as he has. The vulcanite pessary, and the various other forms, including the Wright's or Chambers' modification, I have used, and with many of the difficulties the doctor has narrated. But with his modification it seems to me we can use them with better success. The irritation produced by them has been a great drawback, and in recent years it has been my habit rather to use the form of pessary recommended by one of our members, Dr. W. H. Byford, the slippery elm bougie. It produces a gradual dilatation of the uterus, and often produces remarkable results in the treatment of the flexions, and I have had no bad results from its use. One point that the doctor did not emphasize sufficiently is that the instrument should not be retained long if it produces pain, but it should be removed and the patient put in bed. I should have preferred to have him give directions for the patient to remove the instrument if the pain continued for a long time, for if it does the instrument ought to be removed, and if he should happen to be out of the city and the patient should be unwilling for any one else to see her, serious disease might commence before he returned and removed the instrument. For this reason it is, and always has been, my plan to have the instrument so arranged, by a string or something of that sort, that the patient can remove it herself. We should remember that the instrument should be less than the uterus by a third of an inch; that the uterus is to be put into its proper shape, in a splint, as it were, and then expected to grow right—that it is not cured when it is straightened—if it has been displaced for a considerable time there has been an atrophy of the uterine tissue on one side, and it may take weeks, or perhaps months, to alter the nutrition of the different parts of the organ, and until that change has has taken place it is not likely that the patient is permanently cured, unless pregnancy has taken place and altered the nutrition of the parts. As to pelvic inflammation, the author has been more fortunate than the most of us in the use of stem instruments. One point I wish to add, viz: that when there is any possibility of gonorrhœal poison lurking in the genital passages of the female, greater care should be taken in the use of such instruments, or operative procedure of any sort, for that matter. I feel, when there is reason to suspect that this poison has once been implanted, that I hardly dare to introduce sound, pessary, or other instrument in the interior of the uterus, and believe that such an instrument should be used with the greatest caution in these cases.

Dr. E. C. Dudley said: Mr. President: The marvelous freedom from dangerous inflammation following the treatment of uterine flexure by forcible dilatation and by the application of the intra-uterine stem, furnishes a striking illustration of the fact that the human uterus will sometimes endure an immense amount of abuse. My own preference is generally for the former method, as advocated by Goodell, Ellinger, and others. My experience has only tended to confirm me that forcible dilatation is reasonably satisfactory in its results, and the results are reasonably permanent. I would seldom advocate the use of intra-uterine stem pessaries for retroflexion unless the flexure were of the so-called genital variety, and therefore associated with the uterus, a condition which is very rare. The essayist has, perhaps for reason of brevity, omitted to make the distinction between the physiological and pathological anteflexion. This distinction within a few years has been quite clearly defined by Schultze, Fritsche, and others, and their teachings are now recognized as correct by many of the leading gynecologists throughout the world. In the light of their investigations the old diagram of Kolrausch, which for more than twenty years has generally formed the basis for the illustration of the normal position of the uterus, is now quite generally discarded. The uterus has no absolutely fixed position, but it has a certain normal range of movements. The angle between the body and the cervix may vary according to the varying quatity of material in the rectum and bladder, from zero

to at least 45°; FRITSCHE says 90°, and his observation is possibly within the physiological limits. When the bladder is full the uterus becomes straight and the angle of flexure disappears. When empty the angle may measure from 45° to 90°, and yet not be pathological. It is, moreover, probable that a flexure of much less than 45° when the bladder is empty, should be considered pathological. Furthermore, anteflexion, even within the defined limits, is always pathological if there be immobility at the angle of flexure; indeed, a displacement exists whenever the organ is restrained from its normal movements. In a word, anteflexion is pathological if the mobility of the angle of flexure be increased or decreased beyond the physiological limits, or absent. Want of a clear understanding of these simple facts has led to the invention of innumerable pessaries for straightening the anteflexed uterus, and they have been persistently employed, to the detriment of the patient, in cases of perfectly physiological anteflexion. Suppose a case: The uterus is shown by digital examination to be so low in the pelvis that when the bladder is empty its entire anterior wall is easily touched. The physiological flexure, which may be from 45° to 90°, is then perfectly apparent to the examining finger—the symptoms of vesical irritation are attributed to the flexure, and an anteflexion pessary is accordingly introduced which produces pressure upon the anterior wall of the uterus. The symptoms disappear, and the conclusion is erroneously formed that the relief was dependent upon the straightening of the uterus, when in reality the pessary has, perhaps, produced no such effect, but has merely lifted the uterus to its health level, and thereby relieved the symptoms, which were due not to flexure but descent. The same manner of treatment has often been followed by relief from similar symptoms attributed to anteversion, when in reality the pessary, by lifting the cervix to a higher level, has exaggerated rather than reduced the anteversion. For this reason all vaginal pessaries especially designed for anterior displacements are in no respect superior to the ordinary Hodge pessary; indeed, they are objectionable, because in overcoming the descent they press upon the uterine wall and thereby cause irritation of the organ. Anteflexion is only a symptom which may result from any one of a variety of widely different causes, such as adhesions, uterine fibroid, parametritis posterior, or failure of the puerile uterus to develope at puberty. It would indeed be irrational to attempt the relief of a symptom due to such diverse causes by any single plan of treatment. The essayist would not attempt to do this, but he has neglected to specify the particular flexures for the relief of which he deems the stem applicable. Inasmuch as many of these flexures are dependent upon uterine or peri-uterine inflammation, and inasmuch as there is reason to conclude that dysmenorrhœa and other evils are more the result of the inflammatory state than of the flexure itself, I would advise that the stem be reserved for cases which are not relieved after the inflammation has been removed by safer methods. Such a plan would certainly restrict the use of the stem to a very small number of cases, because the symptoms for which it is to be employed would so often disappear upon the cure of the inflammation. It is indeed probable that the dysmenorrhœa for which the author has employed the intra-uterine stem may depend rather upon some faulty nutrition, or upon some disease of the uterus independent of the flexure, and that the stem therefor gives relief by some change which it produces in the nutrition of the organ. If this be true, it would then follow that the anteflexion *per se* really furnishes no positive indication either in itself or in its results, but that in the same treatment would be equally effective under similar conditions without the co-existing flexure. Congenital anteflexion of the puerile uterus is undoubtedly a condition for which the stem may be considered one of the legitimate means of treatment. Sterility, whether associated with pathological flexure or not, has been successfully treated by the stem. WICKEL says that the presence of the instrument may give a better development to the menstrual decidua and thereby make a better bed for the ovum. One objection to the stem, strongly urged by SCHULTZE, is that by its use the physiological flexure is overcome, and it therefore may be said to produce, rather than relieve, displacement. But we should not permit theoretical considerations to bias our judgement in face of the author's carefully observed results. His contribution is certainly a valuable one, and shows that the instrument, at least in careful hands, is less dangerous than is ordinarily supposed. The author's freedom from inflammatory results is doubtless due to his judicious preparation of each case by means of the olive tipped bougie. Undoubtedly the observations of DR. JACKSON and others must be considered as placing the intra-uterine stem among the useful and approved resources in the treatment of these troublesome cases, but even at the risk of prolixity I again protest against the indiscriminate treatment of purely physiological anteflexion by any means soever.

DR. H. P. MERRIMAN said: I have very little to add to what has been said. The use of the various methods that have been proposed seem to me to aim at one given end, to change the nutrition of the uterus. Forcible dilatation does that to a certain extent; it is temporary, however, in its action. Incision produces an alterative effect and accomplishes its purposes. It does not succeed a great many times,

neither does the temporary action of dilatation. The use of the stem pessary, on the other hand, succeeds because it is keeping up a continuous pressure upon the parts. Now I am decidedly in favor of this treatment by stem pessary; it strikes me that it is the only rational method of treating these flexions, which are pathological. After the cause of a flexion has been removed, that is, the inflammation of the uterus or the pressure of a tumor, or pressure of heavy clothing, or whatsoever causes it, the uterus does not always return to its natural state, and then we need to introduce some method for restoring it to its normal condition, and I do not know any more rational method than this one. This paper strikes me as a very valuable one. The valuable part of this treatment seems to me not to be so much in the use of the stiff stem, as the earlier treatment by the flexible stem, where, by continuous pressure upon the parts, we are able to accomplish the same effect as passing a sound in chronic cases of gleet, producing a healthy action in a diseased organ and thus producing absorption of a pathological exudate. It strikes me that the doctor recognized this condition, for before using the stiff Chambers' stem, when he has been using these bougies, in a great many instances he has found the treatment has nearly cured the disease, and if it had been continued longer I believe a cure would have been effected. The intra-uterine stem by continuous pressure induces an alterative action of the tissues, the absorption of exudates, and a gradual return to the normal condition of the uterus, and a natural tendency toward a straightening of the uterine canal as the uterus becomes healthy.

Dr. Sarah H. Stevenson said: I have listened to the paper with a great deal of interest, and also to the discussion. My methods are different; I have used the stem pessary a great deal in former years, but for the past two years I have discarded it entirely, as some of the results were unfortunate, although I think I have never had any serious results from the use of the stem. I now use, and have for the past two years, the galvanic current entirely, and it is applicable to all cases, especially in those in which the stenosis is so great as not to admit the passage of the bougie. I have never found a case in which I could not use this method with satisfactory results.

Dr. H. T. Byford said: I quite agree with Dr. Dudley in his trite but very true remark, "It is wonderful what an amount of abuse the uterus will stand," and I congratulate Dr. Jackson that he has discarded incision and dilatation in treating flexions. I also congratulate him upon his good success. I believe the mortality from this treatment—the treatment by the intra-uterine stem—has been estimated to be from ½ to 1 per cent. by those who have investigated heretofore. Whether it is so now I do not know. The present per cent. of inflammation of the cellular tissues varies from 2 to 5 per cent., as nearly as I can determine. There are an immense number of cases in which the stem caused inflammation, which have never been published. It seems to me that in considering this subject the reason for this treatment should be made more apparent. There are some who use it as a splint, or merely to straighten the uterus; others use it as a stimulant on account of its continuous pressure. There is no doubt it stimulates and temporarily straightens the uterus, but it is well known that in time, in a large proportion of these cases, the uterus again becomes flexed. The question arises, should we try to straighten the uterus? As Drs. Dudley and Schultze have said, certain flexions are said to be physiological (which I don't believe), the uterus is supported in the neighborhood of the internal os, which may be said to have a fixed place in the pelvis. The elasticity of the tissue will allow that part of the uterus to be pressed in nearly all directions, but it will come back. The fundus may bend forward or backward and remain in such position for some time, and the uterus still be in a normal position. During youth, the child who sits too much has a curved spine, etc., having a uterus pretty firmly fixed at the cervix, will often have the uterus pressed upon by the abdominal contents in the wrong direction. The normal resistance of the uterus to flexure will be gradually overcome (the uterus may even become atrophied), and a flexion results, which, when slight, may be called a physiological flexion, and may exist without causing trouble; but it is pathological. The elasticity which the uterus of normally firm structure displays during the filling up and emptying of the rectum and bladder is hardly worthy of the name of flexure. Any considerable permanent flexure occurring in this way must be the result of want of firmness in the structure of the uterus. If we are going to use a supporter we should use it when the flexure is forming, not after it has been produced. If we will use such treatment as will remove the improper pressure upon the uterus, viz.: by straightening up the spine, using exercise, etc., etc., a stem will be seldom necessary, because whatever flexion has already been produced will usually not cause unpleasant symptoms. If it has gone to the degree of producing atrophy of the uterus, we may need to use a stem pessary, but as a stimulant to the uterine tissue rather than a straightener of this organ. I have seen uteri bent almost like a horse-shoe become impregnated and return almost to their former degree of flexion. The intra-uterine stem, in view of its slight action as a support and powerful action as a stimulant, and its notoriously bad record, should be the last re-

sort. The frequency with which WINCKEL uses the stem is now about once in 218 cases, while formerly he used it about once in 50, and he is using it less all the time. In my experience and the experience of a great many others, if we cure the acute or subacute inflammation of the uterus and then apply stimulating measures, we nearly always accomplish the cure of flexion by safer means. There are, of course, a few cases left in which the use of the uterine stem may be justifiable, but I think they are exceedingly rare. If those present, following WINCKEL, use them only once in 218 times, but few of us will live long enough to do a great deal of harm.

DR. T. D. FITCH said: Mr. President, I think a paper so commendatory of a measure as this, will perhaps lead many of the members of the profession to adopt it without proper precautions and without realizing the dangers which attend the use of the intra-uterine stem. I believe it is a very dangerous instrument to use. I am an advocate, as you all know, of pessaries, but I do think the intra-uterine stem a dangerous instrument, and that in less careful hands than DR. JACKSON'S serious results will often follow. My own experience in the use of it has been limited for the reason that I became alarmed from the bad reports of cases by DR. CHAMBERS himself, the inventor of this bifurcated instrument which DR. JACKSON has exhibited. If the same precautions are used that are advised by DR. JACKSON, I think as a rule it might be entirely harmless—no, I should hardly be able to say entirely harmless, or entirely free from danger—but I think the precautions which he has adopted have been very ingenious and would in the majority of cases prevent serious results from the intra-uterine stem. His use of the bougies preceding the use of the inelastic stem, accustoming the uterine mucous membrane, or the uterus itself, to the presence of a foreign body within its cavity, is very ingenious, and a thing I should never have thought of myself. Although I have tried these pessaries occasionally my great difficulty has been to keep them in the uterus; I might open them in any direction I pleased, spread the blades as widely as I pleased, and they would slip out—they caused so much uterine contraction that they would be expelled from the uterine cavity into the vagina, and I have always been disappointed in the results from their use. For several years while I was in active practice I had adopted the treatment of PEASLEY, for flexion and stenosis, whether caused by exudation or spasmodic contraction of the os internum, that is by the use of his uterotome dividing the stricture of the internal os, and then gradually dilate the canal until I could introduce a No. 12 or 14 sound through the os internum. This was introduced every second day from one week to two weeks until it ceased to be followed by pain, and by hæmorrhage after its introduction, showing that the os internum had been thoroughly dilated and the incision had healed sufficiently so that no blood followed the use of the sound. After the sound was introduced I used a large glycerin tampon for the purpose of depletion and relief from irritation and to support the uterus, if it was an inversion it would hold the fundus up so as to assist in relieving the flexion to a certain extent at least, and preventing the occurrence of inflammation. I have treated a great many cases in this way and with entire satisfaction, and never had a case of acute inflammation of any kind occur as the result. I believe, however, that a majority of cases of flexion are attended with versions more or less. I don't believe that flexions occur so frequently as is generally supposed, unaccompanied with version, the uterus is tipped over more or less in connection with the flexion, and in connection with the treatment which I have suggested I have always corrected the version, and used the ordinary support or pessary to keep the uterus in its proper place, thereby relieving any contraction or pressure which would keep up the flexion. I think the paper an admirable one, and the doctor's precautions in the use of the instruments he has advised, commendable.

DR. H. C. FEEDER said: I would like to ask for information. In the report of these sixty cases of inversion and retroversion it has not been stated how many were accompanied by prolapsus, or what was the cause of flexion; whether in married women getting up too soon after confinement, or whether from acute inflammation. The paper does not go into the facts and state whether the uterus is lightened and thereby goes back of itself to a normal position, nor does it inform us if this could be assisted by giving medicine internally. Much depends upon the state of the patient at the time of treatment, whether they are in a healthy condition, or whether they have some specific blood disease in which medicine would assist in the treatment. And if the medicine has an alterative effect, how much benefit is received from the medicine and how much from the pessary.

DR. JACKSON said, in concluding the discussion: Mr. President, I feel that I ought to express my thanks for the courtesy with which this paper has been received. It is only a thirteen-minute paper, and there are a great many things in the domain of medicine that are not in it, and a great many questions might be asked on subjects growing out of and connected with it, which I could not answer if I were disposed to. The intention of the paper is simply to demonstrate the efficacy of a single remedy in correcting a single deformity. Questions as to whether the uterus was prolapsed, whether the patients had taken anti-

bilious pills, or had cachexia, really do not enter into the consideration of the subject. I supposed that was perfectly plain from the fact that no mention was made of anything beyond the mere condition of deformity. I am very glad so many excellent ideas have been added to it. The suggestion of DR. NELSON as to the patient being able to withdraw the pessary is excellent, and is never omitted. I never introduce a pessary that I do not attach to it a silken cord by means of which the patient can withdraw it in case of necessity. As a rule, every patient should be able to withdraw any instrument placed in the genital passages; the regular attendant may not be at hand when needed, there may be an aversion on the part of the patient to calling in another physician, and she should have the proper means at her disposal. The remarks of DR. DUDLEY as regards the distinction that should be made between pathological and physiological conditions resulting in flexion, are quite proper, and I agree with him fully. We all know that the conditions preceding and accompanying these bent conditions of the uterus are very various; and in many cases no stem, incision, or other means will have a beneficial effect, although they may for a time cause the uterus to be straight. But the mere straightening is not always the main element of cure. When the uterus has been chronically flexed there will be a thinning of the side towards the angle, showing local failure of nutrition, either as cause or effect of the bending. Straightening, therefore, is one element of cure in a uterus where there is insufficient nutrition, and I do not believe that any other means exclusive of this cures flexion. But it must not only be straightened, but its circulation must be fully restored, otherwise the organ will resume its bent condition. We cannot put a splint on the outside of the uterus, and the intra-uterine stem affords a means by which the uterus may be kept straight enough to allow of circulation on each side. The method of treating flexions by forcible and extensive dilatation does more than dilate. It straightens, also. A bend may be just as acute in a large tube as in a small one, and mere stretching will not suffice, and its results usually not be permanent. Gradual dilatation is much more promising, and next to the method by the stem I would prefer it. I have only treated cases of flexion in which dysmenorrhœa was present, a symptom that interferes with the patient's health, and the dysmenorrhœa was usually cured or relieved. I do not think this such wonderful success; only about two-thirds of the cases were cured, some were simply improved, and in some I do not know the result. Yet I think there is no other method that will do quite as well. The suggestions made in the discussion accounting for the safety and success of the treatment are, I think, correctly attributed to the preliminary measures—the slowness of the straightening and the promptness with which any tendency to harm could be met. The object was to accustom the uterus to its tenant, so that by and by it would accommodate a larger one and in this way the uterus had been made to receive, and tolerate the presence of an inflexible instrument. In one case a CHAMBERS' stem was retained twenty months, and I think if the patient had not returned and told me she was wearing it, it would be there yet. It produced no unfavorable symptoms.

DR. A. R. SMALL reported

A CASE OF PISTOL-SHOT WOUND.

May 2d, 1886, he was called to see F. R., aged 23, who, a few minutes previously, had received shot from a No. 32 pistol. Patient was suffering from shock, difficult breathing, and excessive pain in the left leg below the knee. The ball had struck the right eighth rib, about two inches external to the costal cartilage. Sensation was lost in the right leg below the knee. Motion was not impaired in the right leg, though the sensation was lost below the knee. The left leg was hyperæsthetic below the knee, and motion slightly impaired. A drainage-tube was inserted about two inches into the wound, and the wound dressed antiseptically. The patient complained of no pain except in left leg below the knee, where the pain was excessive. Morphine was given hypodermically in sufficient doses to control the pain. Nothing was allowed the patient the first twelve hours but ice, and occasionally water. About 10 p. m. there was evidence of internal hæmorrhage and the patient eeemed to be sinking. Milk was then given in small quantities frequently. The morning of the third he had rallied somewhat.

The urine was drawn by the catheter every eight hours, and contained blood. There was no expulsive force to the bladder. Respiration was normal after the first two hours.

On the afternoon of the 3d patient became delirious, and continued so, with occasional lucid intervals, until death, which occurred at 4:20 p. m., of May 4th.

Autopsy five hours after death. Rigor mortis well marked. Unfortunately, through a misunderstanding, the undertaker had preceded us and injected his preserving fluid, so that we were unable to determine exactly the amount of blood in the right pleural cavity. It must have been quite large, however, as the right lung was entirely collapsed. The ball made a clean round hole through the centre of the eighth right rib on the right side, about two inches from the costal cartilage, passed through the lower side of the right pleural cavity, without injuring the lung, passed through the diaphragm, right lobe of the liver,

and superior portion of right kidney, and through the intervertebral foramen between the eleventh and twelfth dorsal vertebræ, on the right side of the spine, and lodged against the posterior surface of the body of the eleventh dorsal vertebra, just within the spinal cord, where it was so firmly imbedded that it could not be removed without disarticulating the spine, which, for sufficient reasons, we did not do.

Though we found the right lung collapsed, respiration had been normal except the first two hours after the injury.

Dr. Alfred S. Houghton read a paper on

THE DANGER IN SPECIALISM.

He said that specialists had greatly increased medical knowledge and skill, and had secured for many much reputation. Hence young practitioners grasp any excuse for becoming specialists. But man is not a machine, but a complicated organism, and disease is complex, one organism sympathizing with another; hence it is necessary to examine every portion of the body and treat all organs affected. Hence there is danger in a specialist limiting his sphere of action and usefulness to an unnecessary degree. Another danger is that specialists are apt to become egotistic, and give rise to utterances which they will afterwards regret.

RÖTHELN.

BY A. W. MITCHELL, M. D., DIALTON, OHIO.

I am induced to write this article principally by the fact that up to the present time, I have never seen anything on the above subject, in the literature of the medical journals, while there is probably not a disease abroad in the land (M. R. Morden's "scabies" excepted) that goes more universally unrecognized, and to which a greater variety of names are applied, by both the laity and the medical profession. By far the best article I have seen on the subject, is the one in the American System of Medicine, and the description there given is remarkably correct, with the exception, in my judgment, that it is more frequently severe than the article there would lead us to expect, a temperature of 103° to 104° F. being not unusual.

Case.—March 27, Willie C., aged 16 months, was brought to the office with an intestinal catarrh, for which I prescribed. He was just getting over a bad cold, but now he is brought to me with an intestinal catarrh and a good deal of irritability of the stomach. The next evening (Monday) he is no better. Some diarrhœa. Stomach still irritable, pretty high fever, and a rash beginning to appear on face and neck.

Tuesday noon. Temperature 104°, pulse 160. Body completely covered with a rash resembling measles more than anything else, but much redder. No coryza. No effusion of the eyes. Glands of the neck, especially the post-auricular, are swollen, and there is evidently a sore throat. By Wednesday morning this rash has extended down over the legs, and out over the arms. The tendency is to constipation; passages greenish, a good deal of mucus, and smell badly. Slight morning remission and evening exacerbation. The condition remains much the same, temperature ranging from 103° to 104½°. Pulse, from 155 to 170, until Friday. Rash begins to disappear from body.

Saturday morning the temperature is 100½°; pulse, 145; rash nearly all gone; bowels more regular and almost natural. Has nursed well all the time. There is no desquamation whatever, and there has not at any time been any appreciable coryza or suffusion of the eyes, but a hacking cough, which has been noticeable for the last two or three days, is evidently increasing; still, I ventured a favorable prognosis.

Noon. Temperature and pulse rising. 8 p. m. Temperature, 104½°; pulse, about 160. Breathing considerably obstructed. Was called at 1 the next morning (Sunday), and found him much worse. Obstruction in larynx increasing, and patient much prostrated. It was now perfectly evident that we had a pseudo-membranous croup to contend with. I immediately placed him on tonics, while every 10 to 20 minutes I would, with each inspiration, throw into his larynx a spray consisting of a solution of chlorate of potash with tincture of iron and glycerin added. This was persistently used, and resulted in much better breathing, and by night he breathed with comparative ease, but gradually sank, until shortly after midnight, when he died. Every practitioner will readily see the difficulty of giving a positive and satisfactory diagnosis of the above case, with its complications, taking it day by day from the first.

Scarlet fever is epidemic at Springfield, twelve miles distant, but the closest examination fails to reveal any chance whatever for contagion from that place. In the surrounding neighborhoods we have been hearing of "measles," "false measles," "French measles," "scarlet rash," etc., according to the individual fancy. From the first I pronounced it an intestinal catarrh, and when the rash appeared, held that it was only sympathetic from the bowel trouble. Later on, the intensity and persistency of the rash, together with the general course and severity of the disease, made me very guarded in my expressions, both as to diagnosis and prognosis. The *family* "knew" it was scarlet fever. Neighboring children came freely at first to see the little sufferer, but I soon advised them to stay away, telling them

that I was convinced that it was not scarlet fever, but that the similarity was so great that there was room for suspicion, and there was nothing lost by caution, and we would watch for future developments, keeping him all the time on a well guarded line of treatment, treat what we saw, and place and keep his system in as good and vigorous condition as possible, which would enable him to throw off the disease. After the rash left without any desquamation, I felt safe in affirming that it nas *not* scarlet fever, and some children were selected as pall bearers.

In almost exactly two weeks from the first appearance of the rash in the above case, I was called to see a small boy who was broken out with a rash and had a sore throat. On the same day three or four others came, and I found that I was in the midst of a genuine epidemic of rötheln. There was no coryza in any case, but a slight suffusion of the eyes was perceptible in a few. In some it was not. A sore throat was present in all cases. In a few cases this came on before the rash. In still more, simultaneous with it, and others after it had appeared, and was the last to get well. In all cases there was swelling of the posterior auricular glands. All had fever, varying in intensity from a slight elevation of temperature to 104° or more. The other symptoms, and especially the rash, corresponded with the fever. In the severe cases the whole body was covered with a rash, much resembling that of measles, but with almost the redness of scarlatina, and remained out on the body in some cases as long as two days in one place, but in no case do I believe was it more than four days before the entire body was free. In others, the rash was scarcely perceptible, and remained out in one place only a few hours. In several cases there was nausea to commence with, lasting sometimes for a day or more. The majority of cases were very mild, and caused scarcely more than a feeling of malaise, with some sore throat, and an indistinct eruption, which soon disappeared.

This epidemic cleared up the above case. The child had in some way been exposed to the "false measles," and about the close of the stage of incubation, took a severe intestinal catarrh from the effects of cold. The two diseases ran their course together, each aggravating the other. From a study of the nature of the two diseases we will readily see how specially prepared the larynx would be for the reception of a true croup, which stepped in and closed the scene. In about two weeks after the first epidemic broke out, a new crop made its appearance, and I think we can safely place the average stage of incubation at two weeks. There has in no case been any sequelæ, and no deaths, except the one above recorded. This could have been nothing else than a genuine epidemic of rothlen, and yet I have not heard a single physician call it so, except my former pupil, Dr. E. B. Davis, of Northampton. It has evidently been prevalent in the surrounding country under the various names given above, and even some of the isolated cases of scarlatina of which I have heard, are, no doubt, simply unrecognized cases of rötheln. Let us, as physicians, cast aside all such unnecessary and misleading names, as "false measles," "French measles," etc., and call "rötheln" by its right name, and place it where it belongs—a definite, independent disease, alongside with measles and scarlatina. Finally, Mr. Editor, please give us the correct pronunciation of rœtheln.

[Ray-teln.—Ed. Age].

SYRUP TRIFOLIUM COMP. IN SYPHILIS.

BY J. J. GARVER, M. D.

Case 1.—W. D., æt 27, laborer. Came to the dispensary May 1. Gave history of syphilis contracted six months previous. Copper-colored eruption on legs: throat and fauces one mass of mucous patches. Made one application of carbolic acid, and prescribed syrup trifolium comp., in tablespoonful doses, after each meal, with water. In a week he returned, much improved. Some rheumatic pains yet remained. Patient improved remarkably, and in two weeks was like a new man. I am happily surprised at the good results of syrup trifolium comp.

Case 2.—A. F., white, railroader, came to the dispensary May 19. Chancroid on foreskin, enlarged lymphatics in both groins, and inside of left thigh. The latter suppurated and discharged copiously. Pains in bones, especially at night, quite severe. Ordered:

℞ Syr. trifolium comp., ℥ iv.
Potassii iodidi, ʒ v.
M. S. Teaspoonful after each meal, with water.

Saw no more of the case for three weeks, when he came back to the dispensary, saying he never felt so well in all his life.

Case 3.—E. T, female, æt 29, sent for me, and on reaching the residence I found her in bed, suffering intense pain in both tibiæ. Both limbs showed copper-colored spots and nodes. Ordered hot applications locally, and syrup trifolium comp. with potassii iodidi, and in one week the nocturnal pains in the tibiæ had disappeared.

Have had splendid success in several other cases with syrup trifolium comp. alone. It is an excellent vegetable alterative, and in combination with iodide of potassium, it acts marvelously in specific disease.

Correspondence.

NEW (?) SKIN DISEASE—SUCCESSFUL TREATMENT.

My journals have for a year or more teemed with articles on the "New Skin Disease," etc., in which much space has been devoted to discussing date, course, and treatment of this anomaly.

I first met it three years ago, when it got into a school and created an excitement in the district.

I pronounced it not to be scabies, but ordered the children from school and put them on sulphur treatment; completely suppressing the complaint for a time, only to have it return. And this has been my universal experience with this treatment.

Corrosive sublimate and red oxide of mercury proved to be very successful as to the disease, but owing to the ignorance or carelessness of patients did much harm as well.

Internal treatment with Donovan's or Fowler's solution did excellently, where patients could be induced to continue the course long enough; the former requiring less time.

Happening to use tr. iodine on the chest of a pneumonia patient, I found that it produced a cure of all the symptoms of the skin disease where applied.

My attention was now called to PARKE, DAVIS & CO.'S medicated soaps.

I used the cor. sub. and the naphthol soaps; the latter succeeding best.

Make the soap into a stiff lather and apply to the surface and then chafe it in with a stiff flesh brush.

Wash and dry the body carefully and apply:

Lac sulph., ℥ ij.
Lard, ℥ iij.
Petroleum, ℥ j.

Rubbing it carefully into the skin, and allowing the same underclothing to be worn three or four days.

Once does it, but I always direct a repetition of the soap, thrice weekly for a fortnight, as I find that those who have once suffered, are particularly obnoxious to the complaint.

With regard to warm weather curing, I will say that just now the "itch" is epidemic hereabouts.

As to the limit, I cured one man who had suffered six years, and was congratulating himself that next year would relieve him of the "seven year's itch."

As to its contagiousness, I usually see it affect about 25 per cent. in the eight schools I have known it to invade in my practice; and in a large proportion of my families, I find one or two members who escape, provided they sleep alone.

I have found it necessary to have clothing and bedding disinfected.

Hang articles not capable of thorough washing loosely in a tight room and burn sulphur.

Unless this be done you are apt to have a recurrence of your foe.

I notice in very young children that the disease assumes a pustular form, the pustules being about one-fourth of an inch in diameter, and forming especially in the matrix of the finger- and toe-nails.

I always use arsenic internally, with the naphthol soap and sulphur.

DR. CHAS. HUBER, of Harrison, Ohio, judging from the acrid contents of the pustules or vesicles, used aqua ammonia as a lotion with much success.

G. HENRI BOGART, M. D.

SHARPTOWN, Ind.

My method of treating "eczema papulosum," is the following:

Each evening, before retiring, I have my patient rub the affected parts well with strong soft soap, scratching the scabs all loose, and rubbing the soap well in. When this is well done, I have the body washed perfectly clean in warm soft water, after which I grease freely all the diseased parts with the following ointment:

One good sound nutmeg, pulverized; one large spoonful ground allspice; put in one pint of strong cider-vinegar, and boil to half a pint; when taken from the fire, add one large spoonful of sulphur and one of lard. Always heat before applying.

This I repeat for three or four nights in succession, each night washing the old application off before applying the new. I then wait a few days to see if my patient is well. If at the end of three or four days the eruption is not all gone, I repeat the applications as before, and so I continue applying three or four nights and resting three or four, until my case is cured, which generally takes from six to ten applications. I have never known any unpleasant results to follow this treatment. I do not give internal remedies more than to put the digestive apparatus in a good healthy condition. If my brothers of the profession will take the trouble to make, and use, this remedy, I am sure the results will be satifactory.

W. O'NEAL MENDENHALL, M. D.

RICHMOND, IND.

I was pleased to notice the late articles in the AGE on what is styled the "Michigan Itch, or New Skin Disease." I think it can be called Minnesota Itch with equal propriety. Since my practice in this state, over two years, I have treated upwards of a hundred cases. At first

I was unacquainted with it (not having seen it in Ohio), and my prescriptions were not as satisfactory to patient or myself as I desired. Later, however, I have had no cause of complaint. For adults I usually write ungt. hydrarg. ammon. and ungt. sulph., equal parts, with ol. amygdalæ or bergamot. In severe cases, acid carb. will cure. In full-habited persons give:

℞ Pot. acetat.
Tr. digitalis, ää ʒ v.
Syr. sarsæ, ℥ iv.
M. Sig. ʒ j four times a day.

For children use milder preparations of sulphur.

Thorough cleanliness and frequent washing with soap and water are essential to successful treatment.

I have not observed, as DR. BRODIE has, that sweating is beneficial. In this country, the more they sweat the more they itch.

E. B. CROWE, M. D.

KERKHOVEN, MINN.

PRAIRIE ITCH, THE NEW (?) SKIN DISEASE.

When I commenced the practice of medicine, some of the first cases I was called on to treat were prairie itch. I diagnosed all the cases scabies, and treated them with the old-fashioned remedy, sulphur. The remedy failed to effect any permanent cure in my hands, and I cast about for a germicide with more powerful properties.

The vegetable acids and hyposulphite of soda proved very effectual, and I came to the conviction that the disease was dependent on some vegetable parasite or fungus.

Three months ago I, with the kindly assistance of PROF. H. MONTGOMERY, Pres. of the University of N. Dakota, commenced to more thoroughly investigate the disease. My time devoted to this work has been limited, and the material not of the best.

The vegetable organism is found in all the layers of the epidermis, but its chief seat is in the corium. The organisms belong to the class of cryptogamia.

The fungus appear like flattened, short or elongated cells, with a very slender and tapering projection from each end, binding from five to twenty together in a chain, or as an oval cell, with from four to twenty hooklets projecing from its sides. If the difference in appearance is due to different stages of development or not I do not know. A good and powerful microscope (600—800) will bring them into view. Their diameter is from 20 to 30 micro-millimetres, and the hooklets and tapering appendage measure from 10 to 30 micro-millimetres.

I have made arrangements for further investigation of the disease, and if I am correct in my views PROF. HYDE will report more completely at the next meeting of the Dermatological Association.

J. E. ENGSTAD.

GRAND FORKS, DAK.

PEPTONIZED BEEF EXTRACT IN IRRITABLE STOMACH ACCOMPANYING SURGEON'S AND TYPHOID FEVER.

I herewith submit the following case: WILLIAM COOLY, admitted to jail hospital, Grand Island, Neb., April 10th, had received a severe stab with a shoe-knife in the chest four days prior, knife entering left nipple, striking the fifth rib and glancing downward penetrated the intercostal muscle, passing slightly beneath the sixth rib, not injuring internal organs. The wound was nearly three inches in width, he had also several extensive scalp wounds, and four flesh incisions in the scapular region on the right side, also a severe gash on left facial surface, extending fron malar bone, nearly severing the nasal cartilage from its superior attachments. The wound in the chest had been drawn together with sutures of black cotton thread by a local celebrity, and the other wounds dressed with adhesive strips, without cleansing. I removed the dressings and cleansed with an antiseptic solution. Then I introduced a carbolized tent, as near as possible the full depth of chest wound, applying a firm woolen bandage over compress supported by shoulder attachments, and dressed the other wounds after the usual mode. There was great irritability of the stomach during surgical fever, which lasted four days, the patient vomiting everything, even water. After a few doses of sub. nit. bismuth, I ordered the peptonized beef extract in teaspoonful doses every hour. Gave also quinine bi-sulphate, ten grains, every eight hours, and tr. digitalis ♏v in hot water every four hours. There was no more vomiting. I cleansed and dressed wounds daily. From the first dose the prepared solution of peptonized beef extract was retained. Wounds healed quickly—the stab by granulation, the rest by first intention. The man was entirely well May 31st, and was discharged a week later.

In the defective and perverted condition of the stomach in surgeon's fever or fevers generally, particularly in typhoid, the peptonized beef extract, being easily assimilated and rich in nutrient qualities, fulfil an indication unequaled in its class. I have used it in every case since the one stated, and shall continue its friend.

CASWELL T. POE, M. D.
County Physician Hall Co., Neb.

JUNE 5. 1886.

THE FREE NEGRO AND THE SLAVE.

DR. C. E. NELSON, of New York, in the MEDICAL AGE of the 10th inst. criticises an article of DR. LIPTEN, in the New York Medical Journal, in which it is difficult to tell whether he displays the more political intolerance and hatred of former slave holders, or ignorance of the present and former condition of the negroes of the south. Were he to come as a "missionary," or otherwise, he might learn more of what he writes about so flippantly, and would certainly find some people who are at least equal to him in intelligence and morality as well as genuine regard for the welfare of the unfortunate negro race.

We who have been raised among the negroes know them as no one can by reading Uncle Tom's Cabin, or other literature designedly published to warp the opinions of the northern people for political purposes. DR. TIPTON states facts as to the ignorance and superstition of the average negro, also as to the prevalence of venereal among them now and as to their freedom from it before the war; and also as to their having been better fed, clothed, and housed, and better cared for when sick before the war than now, and were more moral, and far less intemperate than now. The mass of them were a happier people than to-day; were free from care; lived in the country, away from the allurements of vice, incident to towns, and were more honest, more healthy, a stronger and better race than at present.

Of course, I am glad to say, there are many exceptions to the rule as given by DR. TIPTON, and the influence of schools may and certainly will aid many others to become good men and women, but the fact stands out too patent, that the experiment of the freedom of southern slaves has not been an unmixed blessing to them, nor an unmixed curse to their late masters. Of the two, the masters have made the more of the opportunities presented, but it is to be regretted that twenty years after the war such articles as DR. NELSON'S should find a place even in the New York Tribune or the Inter Ocean, to say nothing of a medical journal.

W. A. REESE, M. D.

EUREKA SPRINGS, ARK.

YUCCA BACCATA IN ALOPECIA.

I placed some concentrated extract of yucca baccata, or soap root, in the hands of a reliable barber and hair-dresser of this city, for use in two cases of premature loss of hair, occurring in persons about 28 to 30 years of age, from febrile diseases, and of a year or two's standing. In each case it was used in accordance with the directions given, once a week, and I am pleased to say that in both cases it has been attended with decided benefit in restoring the natural growth of hair. It removes the dandruff, softens and cleanses the scalp, stimulates the hairy growth, and leaves it in healthy, glossy condition, as no other remedy, in my knowledge, or that of the barber's who made use of it, has done heretofore.

The patients on whom it was used are highly pleased with its effects, and the barber has often inquired of me where it could be had, etc., and is fully convinced of its usefulness, both under the circumstances named and, in fact, all affections of the hair attended, or produced by a dry, harsh condition of the scalp; and vastly preferable to any other form of soap for shampooing at all times.

J. Q. EGLESTON, M. D.

OLATHE, KANSAS.

MAGGOTS IN THE EAR.

On the morning of June 17, 1886, a laboring man came to my office holding his hand over his right ear as though in pain.

He stated that, on the previous afternoon, an insect had alighted on his ear and rapidly entered the meatus to such a depth that he could not remove it. In about half an hour the articulate came out within reach. On removing it he found it to be a green fly.

Just before coming to me he had removed one maggot. Pain had been such that he had not been able to rest or sleep for four or five hours.

Proceeded to develop the maggot mine. Found them veritable maggots, small, just hatched, not less than fifty, perhaps a hundred of them. Filled the meatus with carbolic-acid water. The worms floated, and were easily removed with a flat probe.

The ear was clean, save a thin coating of soft cerumen within the meatus.

N. P. BLAKESLEE, M. D.

ELMIRA, MICH.

There are already in existence nine national associations in the interest of an equal number of divisions of medicine: The Surgical, Ophthalmological, Otological, Neurological, Laryngological, Gynæcological, Dermatological, Climatological, and Pathological. It is proposed, as a most logical thing to do, to unite these, and such other 'logical associations as may subsequently develop, into one body, the same to be known as the American Congress of Physicians and Surgeons. It is a grand conception, and does honor to the genius of the mind in which it was conceived. We are famishing from the lack of a full assortment of these 'logical national associations, and it would be so nice to have them all bound up in one bundle. The suggestion comes from the south.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JUNE 25, 1886.

Notes.

The beauties of editing a journal are thus succinctly set forth in the Pharmaceutical Record:

Editing a paper is a pleasant business—if you like it.

If the type is large, it don't contain much reading matter. (Ours is compact; we give more than other similar journals.)

If we publish many formulæ folks say they are not reliable.

If we omit them, we have no enterprise or are know-nothings.

If we have a few jokes, folks say we are rattle-heads.

If we omit jokes, folks say we are fossils.

If we publish original matter, they scold us for not giving selections.

If we give selections, people say we are lazy for not writing more, and give them what they have not read in some other paper.

If we give a complimentary notice, we are censured for being partial.

If we don't, all hands say we are a great humbug.

If we remain in our office attending to our business, folks say we are too proud to mingle with other fellows.

If we go out, they say we don't attend to our business.

The murderers have discovered some astonishingly vulnerable parts of the human anatomy of late. From a paper this morning we learn that a Georgia colonel was "shot in the ticket office;" the other day a man was fatally shot "through his door," and not long ago another received a fatal wound "in his window."—*New York Commercial Advertiser.*

He kissed her passionately upon her reappearance.—*Jefferson Souvenir.*

She whipped him upon his return.—*Hawkeye.*

He kissed her back.—*Constitution.*

She seated herself upon his entering.—*Albia Democrat.*

Mr. Jones walked in upon her invitation.—*Etectric Light.*

We thought she sat down on her being asked.—*Saturday Gossip.*

She fainted upon his departure.—*Lynn Union.*

He kicked the tramp upon his sitting down.—*American Pharmacist.*

We feel compelled to refer again to the poor woman who was shot in the oil regions some time ago.—*The Medical World.*

And why not drop a tear for the man who was fatally stabbed in the rotunda? And for him who was kicked on the highway?

The Michigan State Medical Society met at Jackson on the 9th and 10th inst. We regret our inability to attend what is described by those who were present, as a profitable and enjoyable occasion. The usual number of able scientific papers were read and discussed. They will appear in the published Transactions, after which the medical press will be at liberty to select therefrom, for publication, such as may be considered of sufficient interest. There is a regulation of the society which prohibits the publication of the papers read before it before the expiration of sixty days, and to this regulation must be charged our failure to present in this issue a report of the important meeting. While we question the wisdom of this regulation, it behooves all members to respect it, and, doubtless, nothing of merit presented to the meeting, will suffer through this period of forced concealment, while such papers as may be destitute of merit (if such a paper be supposable) will thus be afforded an opportunity to quietly sink out of sight. Perhaps the sixty-day restriction is not such a bad thing after all. Dr. Shepard, of Grand Rapids, was elected president, and Dr. George Duffield, of Detroit, secretary.

The dangers of kissing form the text of a four-page article in the Journal of the American Medical Association, from the pen of Dr. S. S. Adams, of Washington, D. C. He treats the subject from a moral as well as a physical standpoint, and concludes that the practice has degenerated into a hollow sham as an evidence of affection or esteem, while it exposes the kissor and the kissee to a long list of physical dangers, including syphilis, tuberculosis, diphtheria, infectious fevers, herpes, eczema, stomatitis, cancrum oris, mechanical distortions of the mouth, injury of the eyes, rupture of the tympanum, etc. There is, doubtless, much truth in this arraignment of a time-honored custom, and especially when it is indulged in promiscuously in such a city as Washington, where whites and blacks are equally divided, and where Congress is so perennially in session. We would not condemn the custom unqualifiedly, but would advocate great care in the selection of subjects. Properly practiced in

proper cases, it is not nearly such a dreadful thing as DR. ADAMS would make out.

DR. OLIVER WENDELL HOLMES is at present in England, and the cable dispatches indicate that our dear old autocrat is having a charming time, if wining and feasting with lords and literati go to make such a time. The fact that he is received as HOLMES, the poet, rather than as HOLMES, the doctor, will detract nothing from his fun, for he has, probably, done more good with his lines than he has with his calomel, opium and quinine, which three drugs he holds to be all that are necessary in the practice of medicine. He is a good old soul, anyway, and we hope his dissipation may not curtail by a single hour his length of days.

A Philadelphia doctor has figured out that a great many of the ills for which medical relief is sought are purely imaginary. He says that a great deal that passes for heart disease is only mild dyspepsia, that nervousness commonly is bad temper, and that two-thirds of the so-called malaria is nothing but laziness. Imagination, he says, is responsible for a multitude of ills, and he gives, as an instance, the case of a clergyman, who, after preaching a sermon, would take a teaspoonful of sweetened water, and doze off like a babe, under the impression that it was a *bona fide* sedative.

We have latterly been in receipt of a number of requests to discontinue "ads." appearing under head of employment, professional and business chances, the advertisers declaring that the responses thereto have been too numerous to permit of their giving them attention. This is one of the evils connected with advertising in a live journal, of large circulation, and we accordingly advise such advertisers as desire only a very few answers to their "ads.," to seek some other medium for their promulgation. If they persist in advertising in the AGE, they must abide the consequences.

This is the season when monstrosities are being trotted out. A writer in the Chicago Medical Times reports that the spinal column of a twelve-year-old son of a patron is prolonged into a wagging tail covered with a thick growth of hair. The Weekly Medical Review reports a similar case as occurring in a patient which it treated for a broken leg—the spinal column being elongated with a complete tail, covered with a thick growth of hair. The interest in this tale must not be suffered to abate when it is stated that the latter patient was a faithful but unfortunate dog.

Apropos of monstrosities, the people of Detroit have been entertained with a unique lot during the past few weeks. The Ohio girl with feet a trifle larger than the natural growth down there, is a consumptive whose extremities have become enormously enlarged through dropsical effusion. A being with "the face of a Madonna and the body of a camel," is a poor unfortunate suffering from Pott's disease, and compelled by the deformity to go on all fours. The authorities should interpose to prevent these inhuman exhibitions.

"Infinitesimal shrew-mouse squeaklet of a mediker," is one Detroit physician's characterization of another in the public prints. The language is unique and vigorous. We have endeavored to picture an individual to which it would literally apply, but having completely failed, conclude that it is merely a sort of figurative expression, calculated to convey the impression that the party of the first part cherishes none of that love for the party of the second part, which the scriptures enjoin.

The French Chamber has enacted the following: Any adult or free minor, capable of being a testator, may freely determine the mode of his sepulture. He may elect inhumation or incineration, may will his body or any part thereof, to institutions of public instruction or to learned societies, and may regulate the conditions of his funeral, notably in regard to its civil or religious character.

It is reported that his satanic majesty, while on a recent visit to this planet for a cargo of sulphur, was shown a sample of iodoform. He immediately countermanded the sulphur order, and substituted iodoform, saying: "Not in all my realms below does any perfume so please my senses." In other words, the odor of iodoform beats sheol.

DR. A. F. RANDALL writes: "I remember reading in the Michigan Medical News, Vol. I, I think, a communication from DR. F. M. GARLICK, of Port Sanilac, Mich., on the use of chloral for the purpose named, and he uses almost the identical words ascribed in your last issue to the London Medical Record."

Asiatic cholera, hitherto unknown in Australia, has made its appearance in that island-continent. The disease is not indigenous to that country, and the germs which are sprouting out there were imported on a merchantman. The necessity of careful quarantine is thus enforced with another pointed example.

DR. JANEWAY, of New York, speaks highly of the effects of frozen milk, as a refrigerant and nutritive, in fevers. It is especially valuable to these ends when the systemic disturbance is associated with an irritable condition of the stomach.

The Weekly Medical Review is waxing very droll. It has already got as far as conundrums.

Here is its latest: What is the difference between a cow and a baby? One drinks water and makes milk, the other—doesn't. (*Honi soit qui mal y pense.*)

Buxom widow to eligible old bachelor (at an evening party): "Do you understand the language of flowers, Dr. N.?" Dr. N.: "No, ma'am." Widow: "Is it possible you don't know that yellow means jealousy?" Dr. N.: "No, ma'am. Yellow means biliousness."

The German for pharmacist is, or should be, according to the British and Colonial Druggist, Gesundheitswiederherstellungsmittelzusammenmischenskundiger.

The Medical World, in view of the growing practice of sophisticating foods, medicines, etc., suggests an addition to the decalogue: "Thou shalt not commit adulteration."

"Does your liver act well?" asks a medical journal. Replies an uneducated contemporary: "We don't know what the critics would say, but in private rehearsals it takes a leading part."

The city of Louisville is said to be in labor with another medical journal. It (the city) has our sympathy.

Book Notices.

Handbook of Diseases of the Nervous System. By James Ross, M.D., LL.D., F.R.C.P. Lond., and Senior Assistant Physician to the Manchester Royal Infirmary. With one hundred and eighty-four illustrations.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

This is an 8vo. volume of over 700 pages, treating in a style and manner admirably suited to the general practitioner, of a subject generally slighted in the undergraduate course. It is divided into two parts—a general and special neurology. In the first is given a brief outline of the evolution and dissolution of the nervous system. A careful study of this will afford a proper foundation for the consideration of the special affections of the nervous tissue and its functional aberrations. The author has been enabled through his long and extensive experience to present in concise form just such anatomical and physiological facts as are necessary to a proper conception of the therapeutics of this class of diseases. He has thus saved the worker in this direction the labor of selecting for himself from the text-books the so-called non-practical, but, nevertheless, highly necessary foundation for practice in this special direction. In this part he has placed the leading neurologists of both the present and the past under tribute, and in the part devoted to special neurology he has supplemented the material borrowed from such sources by knowledge derived from his own large experience. This latter part deserves to rank high among the most valuable works on practical neurology extant, and is especially commended to general practitioners, whom the rapidly increasing number of neurotic affections compel to a greater familiarity with the means of relieving than they now can boast of. The treatise as a whole is equalled by few and excelled by none on the same subject, now before the profefsion, and to such as feel their need of a work on this subject we unreservedly commend it.

Essentials of a Healthy Home and Wholesome Food for Everybody, Especially for the Working Classes. By Andrew J. B. Jenner, M.D., Member of the American Public Health Association, etc., etc.
Detroit: John F. Eby, Book and Job Printer.

Long life and happiness are the greatest goods vouchsafed to man. To secure them there are conditions to be observed. Nature is kind but still just, withholding nothing essential to man's greatest good, to him who truly interprets her behests, and yields implicit obedience thereto, but denying everything in this line to him who either ignorantly or wilfully antagonizes her. The author of the little work before us has been a close student at her feet, and claiming to have properly interpreted her, gives his interpretation to those in need thereof, in vigorous and clear English. He describes the essentials of a healthy home, and gives minute directions covering the food of the dweller therein—its kind and the best methods of combining and preparing it. He is a vigorous little man himself, and is a living illustration in his own person, of the correctness of the things he teaches.

The Students' Manual of Venereal Diseases, Being a Concise Description of those Affections and of their Treatment. By Berkley Hill, M. D., Professor of Clinical Surgery in University College, London; Surgeon to the University College and the Lock Hospitals; and Arthur Cooper, M.D., Surgeon to the Westminster General Dispensary; formerly House-surgeon to the Lock Hospital. Fourth edition, revised.
Philadelphia: P. Blakiston, Son & Co.
Detroit: John MacFarlane.

This is an epitome of existing knowledge on the subject of venereal affections. As a remembrancer, and as a remembrancer only, it may be recommended. It compresses into its 132 12mo. pages the largest possible amount of information, much of which is, however, necessarily merely suggestive. A list of excellent formulæ occupies the closing pages.

Medical Progress.

A Clincal Lecture.—William Pepper, M. D., LL. D.* gave the following lecture on

CATARRHAL JAUNDICE:

Gentlemen: We have here a case of jaundice. As this man walks around you see that he has jaundice. All the tissues of his body are stained by the coloring matter of the bile, which exists in the blood in undue proportion. I say all the tissues; the skin, the mucous membrane, the gums, and just so the brain, the heart, and the bones. They are all yellow. All the secretions are stained, the urine, the tears, the humors of the eye; every part of this man's body is stained with bile, except the contents of the bowel, and these are of a clay or putty color, owing to the absence of bile.

Jaundice is either dependent upon suppression of the bile, in which case the bile-forming function ceases and the coloring matter remains in the blood, or it is dependent upon retention and resorption of the bile. The exit of the bile through the gall-ducts being prevented, it becomes dammed up, as it were, and is absorbed by the blood.

Jaundice from suppression is comparatively rare. It is found principally under the following circumstances: In the first place, a powerful nervous influence will cause a complete drying up of the bile, just as a like cause will cause an arrest of the flow of milk in a nursing woman, just as it will cause the tears to dry up; so the bile may be entirely arrested and jaundice come on in two or three hours from suppression. Again, jaundice from suppression exists when the organic structure of the liver is seriously diseased, as in advanced fatty degeneration, when the cells are to a great extent converted into fat; also in acute inflammatory degeneration of the liver, the so-called acute yellow atrophy of the liver. Then we have jaundice, possibly from suppression, in such grave blood diseases as yellow fever; but in these cases the exact pathology of the jaundice has not been determined. It may be due to changes in the coloring matter of the blood (hæmic or hæmatogenic jaundice). Jaundice from suppression is, as I have already said, comparatively rare. In the majority of cases, jaundice is not due to torpidity of the liver, not due to non-secretion of the bile, but to the fact that the bile which is secreted cannot escape. When I meet with a case of jaundice I first ask myself: "What cause is there producing obstruction in this case?" If I can find no obstructing cause, I then begin to suspect some grave disease of the liver. The causes of obstruction are very numerous, and we shall meet with some of them as we study this case.

The symptoms of jaundice are very plain. There is staining of the tissues and the secretions, particularly the urine, which becomes dark-red, then brownish red, and then perhaps as dark as porter, and gives, with Pettenkoffer's test (sulphuric acid and sugar), a cherry-red color, due to the presence of the biliary acids. A glance at the urine is generally sufficient to determine the presence of bile, or a small quantity may be put on a plate and nitric acid added. If bile is present there will be the characteristic play of colors.

Here is our first patient, a jeweler. He has been troubled with his liver for several years, and for a year has had jaundice off and on. He sometimes gets entirely white. The attacks he thinks result from indigestion and taking cold. They are preceded by a slight pain in the region of the liver. He has lost considerable flesh. He has never had chills and fever. Does not drink much.

Perhaps the most common cause of jaundice from retention is catarrh of the bile ducts, resulting from attacks of indigestion, or more commonly from cold. The common bile-duct as it enters the intestine passes obliquely through the walls of the duodenum.

When a person gets a slight attack of gastro-duodenitis, an acute catarrhal condition, which might follow a little indigestible food or taking cold, the mucous membrane of the duodenum becomes swollen and closes the mouth of the duct, or the inflammation may extend to the bile ducts, producing gastro-duodenal hepatic catarrh, and causing obstruction to the flow of bile by the swelling of the mucous membrane. This is, of all the conditions causing jaundice, by far the most common. When a man has had it once, he is very liable to get it again, unless the first attack has been perfectly cured. This man appears to have had such a condition of affairs.

Catarrhal icterus is accompanied generally by nausea, vomiting, some little diarrhœa and pain in the epigastrium. After this has lasted for a few days, the stools become pale (devoid of bile), and the conjunctiva a little yellow. The diarrhœa may or may not continue. As the case advances, the jaundice deepens, the stools become less in number and jaundice may occur. We then have a fully developed case of icterus. This may be a single acute attack, which will in a short time end in recovery under judicious medical and hygienic treatment, great care being taken to prevent exposure to any depressing cause, particularly changes of weather and damp, the use of counter-irritation over the liver, the employment of alkaline laxatives, particularly sulphate of soda in the form of Carlsbad water (Rochelle salts will do almost as well), a very restricted diet, and, in addition, some alterative astringent, as bismuth, calomel in small doses, the salts of silver, or, if the irritation is slight, the mineral acids (nitro-muriatic). Under this treatment the attack usually passes over in ten days to two weeks; but it leaves a spot very liable to relapse, so that after a man has one attack he frequently has several. I have often seen patients who for five or six years had spells of jaundice at intervals of a few days, a few weeks, or perhaps a few months, brought on by inconceivably trifling causes. There is in such cases a chronic thickening of the mucous membrane of the bile-duct. Picture to yourselves a man with chronic nasal catarrh, a chronic thickening of the Schneiderian membrane. Let such a one stand in a draught or get his feet wet, and within half an hour his head will be completely stopped up. It is the same way in the bile ducts, the swelling obstructs the flow of the bile and causes jaundice. Chronic catarrhal icterus is one of the commonest sorts of

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jaundice. In these cases, careful attention to dress, diet, and hygiene, continued counter-irritation, guarding the hepatic zone with a flannel belt, the prolonged use of the drugs that I have mentioned, combined with Carlsbad water, or some preparation of alkaline salines, will usually result in a cure.

The most useful of all alteratives is nitrate of silver. I use it with great confidence, carrying it as far as I think safe.

As to the mode of administration, I think that its value is so well recognized by the profession that it is not necessary to speak of that. The dread of the laity is discoloration of the skin from the use of nitrate of silver. The only cases in which I have seen discoloration is where the drug has been taken for a long time for epilepsy. In three instances (the only ones that have occurred in Philadelphia for a long time, two of these were wives of physicians), the patients had gotten hold of old prescriptions containing nitrate of silver, and had taken it continuously for from three to eight years. I have never had a case of argyria in my own practice, although I prescribe nitrate of silver very constantly. I know of no drug more useful in chronic irritation of the gastro-intestinal mucous membrane, and chronic irritation of this membrane is the most common malady that we have to treat in this climate. I give the drug in pill form, in divided doses, guarding it, if the bowels are loose, with opium, or, if the bowels are constipated, associating with it a little belladonna, and sometimes adding to the belladonna, nux vomica, if there are evidences of agony of muscular stricture of the bowel. A favorite formula is:

℞ Extracti opii, gr. iij.
Argenti nitratis, gr. vj.
M. et ft. mas. in pil. xxiv, div.
Sig.—One thrice daily one hour after meals

Thirty grains of nitrate of silver can be taken without any danger of discoloring the skin. According to the above formula the patient will receive three-fourths of a grain of silver daily, so that he can safely take the pills for forty days, but we shall only give it for thirty days. He will have then taken twenty-four grains. After having taken this amount he will discontinue the drug for two weeks. If there were a little constipation, I should use the following:

℞ Argenti nitratis, gr. iv.
Ext. belladonna, gr. ij.
Ext. nucis vomica, gr. vj.
M. et ft. mas. in pil. xxiv, div.

Before the skin becomes discolored the gums become blue. A bluish-red line appears at the junction of the teeth and gums. Just as we have a blue line in lead-poisoning, so in argyria we have a similar line before the discoloration of the skin.

After giving the remedy for one month, stop, and in the interval use some other remedy, of which I shall speak presently. When the use of nitrate of silver is resumed give the pills until eighteen grains of the drug have been taken, and then again stop for two weeks. In this way I have often given eighty grains of nitrate of silver in six months, and have never seen any bad results from it; not that I recommend you to give such large quantities, but in bad cases you can do so with safety.

During the intervals you must use some other remedy. Muriate af ammonia is very useful. Iodide of potassium is also very useful. I might stop here to tell you how to give this drug with the view of affecting the mucous membranes and the liver in chronic catarrhal conditions of that organ. Iodide of potassium is commonly prescribed (I suppose from fear that it will derange the stomach), to be taken in water, immediately after meals. When it is given in large doses, for constitutional syphilis, it is well to give it so, especially if it is associated with the bichloride of mercury; but if you are giving it in catarrhal diseases and to affect distant organs, it is better to give it freely diluted and on an empty stomach. I would order, for instance:

℞ Potassii iodidi, ʒ ij.
Aq. destillatæ, Oj.
Sig.—A teaspoonful in half a glassful of water three times a day on an empty stomach.

It may be taken at eleven o'clock, 5 o'clock, and at bed time, giving it as far away from the meals as possible. The dose should be gradually increased to two, three, four teaspoonfuls, a tablespoonful, or more, according to the tolerance of the system. If this causes any irritation you will find that Apollinaris or Seltzer water will act better than pure water, or if you add a little bicarbonate of soda or even chloride of sodium to the water in which you dissolve the iodide of potassium it will act better than simple distilled water. We should give them in the interval muriate of ammonia, iodide of potassium, or the mineral acids.

Catarrhal jaundice sometimes comes on with pain. You should in such cases carefully enquire in order to determine whther or not the pain was severe enough to justify the inference that a gall stone had passed, for after catarrhal obstruction gall stones are the most common cause of jaundice from retention. If a patient passes a gall stone it may scratch the lining of the gall ducts, leaving behind a state of irritation that may cause inflammatory swelling and finally lead to a chronic inflammatory condition

Now, as to the character of the pain produced by gall stones. It comes on, as a rule, pretty suddenly and sharply, very generally in the region of the gall bladder, extending around the base of the chest and up toward the right shoulder. Pain seated over the liver is a very constant symptom There may or may not be soreness. There is usually nausea and vomiting. The matters vomited are at first the contents of the stomach, then mucus, and finally bilious matter. There is a feeling of weakness, the extremities become cold, the patient feels faint, and the pain may bring on a syncopal condition. The pain may last for fifteen minutes, an hour, several hours, or in cases of severity, until conquered by hypodermic injections of morphine, large doses of opium, or the inhalation of ether. After the pain passes away the patient has a sort of bruised feeling and tenderness in the epigastrium—the amount of this depending upon the amount of injury caused by the stone in its passage. If the obstruction has lasted some little time, we may find the jaundice coming on the next day, the urine loaded with bile and the stools putty-colored. It is greatly to be regretted that in

all these cases a careful search is not made to find the stone in the feces.

The relations between gall stones and catarrhal icterus are very interesting and double. A gall stone may form, and passing through the gall duct, scratch the mucous membrane, and lead to a chronic inflammation, or, on the other hand, the bile may be obstructed by catarrh of the ducts, stagnate in the gall bladder, and lead to the formation of gall stones. You will not, therefore, be surprised to find the two affections frequently present at the same time. A patient with catarrhal icterus may, after he has gotten considerably better of the jaundice, have a severe attack of pain followed by the passage of three or four stones; under treatment the obstruction has been removed and the stone allowed to enter the duct. The stone may have been present before the attack of catarrhal jaundice, or it may have formed as a result of the stagnation of the bile.

Only yesterday I saw a gall stone from a lady who was under my care three or four years ago. She had had frequent attacks of catarrhal icterus, unaccompanied by much pain. It was an obstinate case, but she became much better and returned to her home. Shortly afterward she had a very severe attack, accompanied by pain, nausea, vomiting, paleness, and coldness. Her physician reported to me. I telegraphed, "search the stools." Five stones were found. She again became better, and several months passed when she had another attack and a number of more stones were passed. Day before yesterday the largest of all was passed; large, with its facets polished. It had been lying in the gall bladder for several years. All this time she had been under judicious treatment to prevent the formation of gall stones.

Whenever the patient has had pain of sufficient gravity to justify the suspicion of gall stones, search the stools every time he has an attack.

Other causes of jaundice from obstruction are tumors pressing upon the gall ducts, such as cancer, enlarged glands in the fissure of the liver, disease of the head of the pancreas, and local inflammation giving rise to induration, adhesion, and contraction. These cause obstruction to the flow of the bile through the ducts and jaundice from retention.

Now, let me again call attention to this patient. He has been complaining with his liver for four or five years. Lives in Philadelphia; does not drink much. Five years ago had a violent attack of pain, said to be due to gall stones. Soreness remained for two or three weeks. Has had more or less pain in the region of the liver. The attacks of jaundice come and go. They are brought on by taking cold and indigestion. We wish first to get rid of the jaundice. This, I think, we can do, for it is clear that there is not an impacted gall stone. When a stone is too large to pass through the ducts, the patient suffers intense pain, the jaundice is great, the urine is loaded with bile, and the stools are white, blood poisoning results, and altogether it is a very serious condition. If the stone becomes impacted in the main bile duct it soon results fatally. This man has a chronic catarrh of the mucous membrane of the gall ducts with a suspicion of gall stone.

I shall order him a diet of a very restricted character. At breakfast he can drink tea, weak cocoa, or cambric tea (milk and hot water), but no coffee, and eat some stale bread, mush and milk, and occasionally a small piece of lean meat. At 10 o'clock he can take a glass of buttermilk. At dinner, lean meat, green vegetables, spinach, stewed tomatoes, stewed celery, or canned string beans, but no dessert. With this he can take stale bread and water. At supper time, vegetables, tea, milk, or cambric tea. No rich food nor butter, and but little sugar should be given. In the evening he can take another glass of buttermilk. That will be an ample and nourishing diet, and at the same time unirritating. He will take a teaspoonful of Carlsbad salt, dissolved in half a glass of hot water, the first thing in the morning and again in the evening. I shall order him a pill containing:

℞ Argenti nitratis, gr. ¼.
Pulv. opii, gr. ¼.
Ext. belladonnæ, gr. 1-10.
Three times a day.

I want now to call your attention to the importance of enlargement of the liver as bearing upon the question of jaundice from obstruction.

This man has just been admitted. His abdomen is now exposed and you see how he has scratched himself. You will frequently meet with this condition, due to the irritation and itching caused by the bile.

I have here a short history of the case, which I shall read: "J. C., moderate drinker and smoker; no venereal disease; has been sick ten weeks. The trouble began with itching of the skin, nausea, vomiting, and pain in the pit of the stomach. Before the jaundice appeared the bowels were regular, and afterward they were irregular, mostly diarrhœa with white stools. Jaundice came on about a week after the first symptoms. The urine has a specific gravity of 1017, and on standing deposits amorphous urates, is loaded with bile pigment, but contains no albumen." Here is an acute attack of jaundice running on to a chronic condition.

The epigastrium is decidedly full. There is resonance below the spleen, showing that there is no enlargement of that organ. There is resonance over the lower part of the abdomen. The liver dulness begins a full hand's breadth below the margin of the ribs. It is distinctly hard to the touch all over the epigastrium. Both the right and left lobes are enlarged. Here is a case of jaundice coming on for nine weeks, with rather acute symptoms of gastro-intestinal irritation, in a young man.

What is the cause of the enlargement? The common causes of enlargement along with jaundice are chronic congestion of the liver, which often gives rise to very great enlargement, tumors of the liver—for convenience grouping them all under the name of sarcoma, though they may be malignant or non-malignant—tumors about the liver, abscess of the liver, and cystic tumors or hydatids. These are the common causes. Then we have as a cause of enlargement of the liver which does not usually give rise to jaundice, albuminoid degeneration. I should have stated under the head of chronic congestion that we sometimes have an inflammatory condition of the liver with enlargement, inflammation and hyper-

trophy of the inter-lobular connective tissue not followed by contraction (hypertrophic cirrhosis).

These then are the conditions of which you have to think when you come across a case of jaundice with enlargement of the liver. It is usually easy to distinguish between them, as they occur under different conditions and in different sorts of patients. Albuminoid degeneration is a constitutional disease, and usually the spleen and kidneys are also affected. There is enlargement of the spleen and albuminuria from implication of the kidneys. It occurs in patients who are for the most part old syphilitic cases, or else have had long standing pus discharge from some source; old phthisical patients, subjects of long standing chronic bronchitis; necrosis of the bones, long and copiously discharging fistulæ, patients saturated with syphilis, these are the cases that get albuminoid livers. In this disease the liver is large but retains its natural outline; it is not tender; the spleen is also enlarged. Jaundice is not common, but on the other hand dropsy is very common, usually ascites.

This man has had no venereal disease and no discharge of pus. This has come on acutely, with pain and jaundice. There is no affection of the spleen and no albuminuria. We may safely say that he has not albuminoid degeneration of the liver.

Tumors, cystic or solid. We determine the presence of these for the most part by finding that there is a distinct prominence which is separable from the general mass of the liver. You may come across cases in which carcinoma of the liver is infiltrated. The liver becomes enlarged and retains its outline, but there are scattered through it many (perhaps hundreds) nodules of carcinoma from the size of a pea to that of an English walnut, none of them, however, being large enough to cause a distinct tumor. This is a rare condition and is much harder to distinguish than that in which there is a nodule projecting from the surface of the liver. The first thing to determine is whether or not the enlargement of the liver is regular. In this case it is regular and uniform. There is apparently no cystic nor solid tumor, unless it is a case of infiltrated neoplasm. His age is against the idea of cancer, for it is very rare to have cancer of the liver in such young subjects, although I have the specimens from a man scarcely older than this one who died from an infiltrated cancer of the liver. Again the attacks come on acutely with symptoms of gastro-intestinal irritation, and then came jaundice.

There is no tumor that fluctuates as a cystic tumor would, and then these tumors do not usually give rise to jaundice.

We now come to abscess of the liver. This is one of the most delicate points in the consideration of jaundice—the existence or non-existence of abscess of the liver. It brings us to consider the question of fever as associated with enlargement and pain. In a case of enlargement the question arises, Is it associated with fever or not? You ask the patient, "Do you have creeps, then fever, followed by sweats?" Usually, "No, not at all," will be the answer. This patient has had no fever. His skin is cool, the pulse is good. Let me say in passing, that you very often find that the presence of bile in the blood makes the pulse slow. This man's pulse is 48 in the minute. This is not at all uncommon.

I should sharply divide those cases in which there is fever from those in which there is no fever. Malignant disease is unaccompanied by fever. Hypertrophic cirrhosis and simple chronic congestion have no fever, but abscess of the liver has fever of a hectic character. Catarrhal inflammation with obstruction of the ducts and damming up of their contents, leading to disorganization of the retained matters, is accompanied by fever, and in these cases the liver becomes so congested that we have enlargement of the organ. Abscess and chronic catarrhal inflammation with decomposition of the bile give rise to fever. Other causes of enlargement do not produce fever. You see, therefore, the importance of determining the presence or absence of fever.

This man says that he has no fever, consequently that would be a strong point against abscess. I will not say that it absolutely dismisses abscesses, for sometimes there may be latent abscesses of the liver. I must say a word to you on this point. There are several parties to-day who assert that latent abscess of the liver is a common condition, that it exists in many persons, and that many hypochondriacs have latent abscess of the liver. My own experience, both in hospital and private practice, and that of the bulk of the profession is against the prevalence of hepatic abscess, and very strongly against the existence of hepatic abscess without distinct symptoms of abscess. Latent abscess may exist in very rare instances, but I am satisfied that these cases are most exceptional. It is certainly most unjustifiable to stick trocars into a man's liver under the idea that he may have a latent abscess. It will, as a rule, do no harm, I admit, but I think that we should not tap the liver unless there are symptoms leading us to suspect an abscess.

At a subsequent lecture I shall give you an opportunity to again see these patients.—*Medical Bulletin.*

Massage as a Therapeutic Agent.—By Wm. Murrell, M. D., F. R. C. P., Lecturer on Pharmacology and Therapeutics at the Westminster Hospital; Examiner in Materia Medica to the Royal College of Physicians of London and the University of Edinburgh.—Massage is of such inestimable value in the treatment of many intractable diseases, that it is to be regretted that so little is known about it in this country, and that it is so rarely employed as a therapeutic agent. It is often spoken of as a new method of treatment, but it has been in general use on the continent for a long time, and, more than ten years ago, received the adhesion of Billroth, Langenbeck, Esmarch, and other authorities. In a crude and primitive form, it is very ancient indeed, and is probably as old as surgery itself. Amongst the Greeks and the Romans it was extensively employed, both as a means of hastening convalescence from long tedious illness, and to relieve pain, and render supple bruised or injured joints. The writings of Plato abound in references to this mode of treatment, and its virtues seem to have been very generally recognized.

It is to be feared that there is a certain

amount of prejudice against the employment of massage, arising, probably, from the fact that it is frequently confounded with "shampooing" and "medical rubbing;" but it is, in reality, a scientific mode of treatment well worthy of attentive study at the hands of skilled physicians and surgeons. The literature of the subject is extensive, and it would be impossible to give, within the limits of a short article, even an abstract of it. There are several kinds of massage, but the system almost universally adopted in Germany is that associated with the names of METZGER and von MOSENGEIL. METZGER may be regarded as the father of the modern phase of massage, while PROF. von MOSENGEIL, by his accurate and painstaking experiments, has done much to establish it on a sound scientific basis. Those who have studied under the last named distinguished surgeon, and have had an opportunity of seeing him practice his method, will appreciate the fact that there is much more in it than at first sight appears. It is essential for success that the various processes should be carried out systematically, and in a definite order; although, of course, the same method of treatment is not applicable to every case. Every "movement" begins and ends with *effleurage*, the palm of the hand, and sometimes the knuckles, being employed for the purpose. It is always centripetal, and is performed with considerable rapidity and force. *Pétrissage* is a more complex process, and is by no means easy to acquire, although it looks simple enough. *Friction* is performed with the tips of the fingers, and is used in conjunction with *effleurage*, chiefly in the treatment of various affections of the joints. This term, which was originally introduced by von MOSENGEIL, is an unfortunate one, for it has nothing in common with what we ordinarily understand by friction. *Tapotement* is a kind of percussion, and may be performed either with the tips of the fingers, the partially closed hand, or its ulnar or radial border. METZGER rarely employs electricical treatment in conjunction with the manipulative processes, but von MOSENGEIL attaches much importance to it, and, in suitable cases, uses both the interrupted and constant currents to stimulate the motor points. He dispenses with complex apparatus, and his sessions are of short duration, rarely exceeding five minutes. On the continent, the physician or surgeon is usually his own operator, it being considered inexpedient to employ, even as an assistant, anyone who has not been thoroughly and systematically trained, a process which requires, at least, two years of unremitting attention. It is known that, in many instances, incalculable harm has resulted to patients from ill-directed efforts, or the selection of unsuitable cases. For the treatment of women and children, an accomplished *masseuse* is essential; but she must be well educated, and should have such a knowledge of anatomy and physiology as will enable her to carry out the instructions of the physician intelligently. It is not at all necessary that she should be physically strong, aptitude being of more importance than mere muscular strength. The hands must be soft; and, if proper precaution be taken, there is never any risk of abrading the skin.

It is no easy matter to say in what class of diseases massage proves most useful. Unfortunately, its employment has been advocated in many cases, for which it is essentially unsuited. Accurate diagnosis is of the utmost importance, and the sphere of usefulness of this remedy will, with increased experience, become more accurately defined. My best results have been in infantile paralysis; and it was in consequence of the success achieved in certain obstinate cases of this disease, that my attention, as has been elsewhere stated, was directed to the subject. Progress is often slow, but the ultimate results are most satisfactory. The nutrition of the parts is maintained until new cells in the spinal cord take on the functions of those which have undergone degeneration, or have been destroyed. Massage is, undoubtedly, of much value in many cases of obstinate neuralgia, and succeeds admirably in some forms of muscular pain, such, for example, as those described by the late DR. INMAN, under the term "myalgia." There is a general consensus of opinion that it is well adapted for the treatment of chronic joint-affections; and most of those I saw treated by von MOSENGEIL were such as would, in this country, be considered incurable, or would drift into the hands of "bone-setters." There are some diseases of internal organs in which it is, undoubtedly, useful. Not long ago a gentleman, aged 68, came to me complaining of shortness of breath, and increasing disinclination to take exercise. He had been in business, and had led a most active and energetic life. Three or four years ago he retired, and, from that time, experienced a gradual falling off in health. His appetite was poor, his bowels were obstinately confined, and he was nervous and anxious about himself. He was found to have a loud apex systolic murmur, and the heart's action was weak and irregular. I suggested massage, which was carried out systematically four days a week, for a period of six weeks. He improved from the very first, and, before the conclusion of the course, was better than he had been for many months. His appetite returned; his hands and feet were warmer; the bowels became regular; he slept well at night; and his spirits improved in a most satisfactory manner. In other cases of obstinate constipation, especially in women, I have known massage of the abdomen do a great deal of good.

In a well-known group of symptoms from which women frequently suffer, massage is essentially useful. I recently saw a lady, aged 45, or thereabouts, a professional singer, who was laboring under the impression that she was going mad. She was so nervous that she was quite unable to accept an engagement, although she had been constantly before the public, and had hardly missed a night for twenty years. She told me that she felt she was not to be trusted, and that, if left alone, she would do herself and her children an injury. She was afraid to go near an open window, so great was the temptation to throw herself out; and she even begged that the knives might be removed from the table at dinner. These symptoms were greatly intensified after each monthly period, and she insisted that she was suffering from cancer, or some organic disease of the stomach or womb. She was restless at night, and would often get up in the early morning, and walk for hours, until thoroughly exhausted. She was given full doses of the bromides—a drachm, or more, four times a day—but

with only temporary benefit. Massage was then tried; and it seemed, to use her own expression, to soothe her, and calm her, and make her forget her troubles. The case was a prolonged one, but now, at the expiration of three months, she is much better, and will soon be able to resume her professional duties. In several other cases of restlessness and inability to sleep, the same method of treatment has proved efficacious.

DR. GRAHAM, of New York, speaks highly of massage in the treatment of neurasthenia. He uses it for those "who, in spite of rest, change, and medication, have become chronic neurasthenics, the result of business reverses, overwork, worry, loss of relatives, disappointed hopes, or as a sequel of some affection that has existed in some part of the system, but which has recovered or has become of secondary importance." These symptoms may be somewhat ill-defined; but, I have certainly found massage of the greatest use in what, for want of a better name, has been called "spinal nervous weakness," or "neurasthenia spinalis."

In the treatment of corpulence associated with constipation, massage is of much value. Some months ago I saw a lady, aged 38, who, as a result of much good living and little exercise, had become inordinately stout. She was short of breath, and was disinclined for exertion of any kind. She had been fond of literary pursuits, but even those had lost their charm, and were irksome to her. She was extremely irritable, and a source of trouble and anxiety to her friends and relatives. Massage was prescribed, and in three months she lost a stone and a half in weight, and improved notably in other respects.

For many forms of menstrual disturbance, massage may be safely prescribed. I recently saw a young lady, aged 19, who suffered intensely at each monthly period, the pain being so severe, that hypodermic injections of morphine had to be resorted to. Massage of the abdomen and pelvis was prescribed, and from that time there was no return of the trouble. CAZEAUX has reported several similar cases, in detail. In the convalescence from acute illnesses, this mode of treatment is a great help and comfort to the patient. There can be no doubt that massage is a very valuable therapeutic agent, and is likely to yield good results in many complaints other than those I have roughly indicated.—*Brit. Med. Jour.*

THE TOPICAL USES OF EARTHS.—DR. HEWSON, of Philadelphia, read before the Medical Society of the State of Pennsylvania, at a recent meeting, an interesting paper on this subject. For 16 years he has used different kinds of earth as topical applications in various diseases which involve the skin—small-pox, measles, scarlet fever, erysipelas, etc. He has used it in form of paste, and dusted dry upon the surface.

Clay has proven to be the best application, either dry or in paste. The reports of cases made, show the undoubted efficacy of the application on the local and constitutional conditions. To quote from his article:

"In all cases of these four diseases which have fallen under my care since 1875, I have, without discrimination, always used applications of clay, and following these applications I have always noticed:

"First.—A direct and rapid reduction of temperature.

"Secondly.—An allaying or, more positively, a dissipation of pain or distressing local sensations which belong to each of these diseases.

"Thirdly. — A diminution of the duration which is characteristic of each.

"Fourthly.—The allaying of the intensity of the general or constitutional symptoms belonging to each.

"Fifthly.—The prevention of the complications which occur so frequently as to have long been recognized as characteristic of each special disease.

"Sixthly.—The destruction of all contagiousness and powers of propagation of each.

"It is but right that I should here state my mode of application, which will explain my association of measles with scarlet fever, and small-pox with erysipelas. Thus, in the various forms of scarlatina and rubeola, as well as German and French measles, I have always pursued the plan of dusting the powdered earth all over the cutaneous surface. There has always followed a rapid reduction of temperature, as shown by the thermometer in the patient's mouth, as well as in the axilla or groin. This reduction has generally been about 5° F. when those diseases were in the stages of invasion, and 10°, or even as much as 15°, when the applications of the earth were not made until those diseases had progressed beyond that stage.

In erysipelas and small-pox, I have always applied the clay directly to the skin in the form of a smooth paste, made by mixing it freely with water in a glass or china mug by means of a wooden spatula, for the reason that I wish it to hold fast and constantly to the part, a result which is always commensurate to the full whipping given to the paste. The water is here so rapidly devoured by the earth that there is always at first a marked increase of temperature of the dressing. This warmth, which is appreciable by the patient as well as by the attendant who has made the application, lasts over an hour; indeed, until the clay has become dry.

"Allowing for the difference due to the mode of application, my results show a most positive and continuous reduction of temperature following the application.

"The preliminary temperature—that taken before the first dressing was applied—has always been recognized by me as indicative of the severity of the disease according to its stage; and I have always been satisfied with that taken at the end of the first 24 hours as showing the effects of the earth on the disease, the greater reduction showing the greater destruction of the morbid process, or of its influence on the patient's condition.

"This reduction, during the first period of 24 hours, has always been greatest in measles, next in erysipelas, scarlet fever, and, last, in small-pox—that of measles averaging 10°, of erysipelas 8°, scarlet fever 6°, and of small-pox 5°, a difference occurring in all of them according to their being, when this application is made, in their initiative, full, or fading stages. The change of temperature on the second period of 24 hours has never been found to be

much, if any, save that in scarlet fever it was always as great as during the first period.

"In the third period, erysipelas has always ranked first, then measles. Where the cases had been treated in this manner *ab initio*, they often showed no increase over healthy temperature, the difference being often evidently due to that of the mode of application used; erysipelas and small-pox showing more than measles and scarlet fever, because, with the former, whatever renewal of dressing had to be made was without taking the original off, but by adding another layer of the paste on."—*Buffalo Med. and Surg. Journal.*

[Doubtless clay is a valuable application for the purposes above indicated, but the reduction of temperature claimed is calculated to cast a doubt upon the correctness of the author's observations. A reduction of 15° in a patient's temperature may be safely set down as impossible.—ED. AGE].

MANACA IN RHEUMATISM. — DR. BERGER says: It is now about five years since I commenced the use of manaca in rheumatism, and must say, that it has given better results in practice, than any other single remedy I have ever employed, and perhaps, equal to any combination of remedies. I have used it in all forms of chronic rheumatism, with equally good results. I have employed it so often in these cases, that I have no doubts any more about its possessing anti-rheumatic properties, in an eminent degree. It undoubtedly eliminates the lactic and uric acids from the system, and by assisting digestion and assimilation, prevents their reforming in excess. It also has valuable alterative properties, and may be employed in scrofulous and syphilitic diseases to advantage.

I will report a few cases treated, as an illustration of its use. I will select first one—J. W. M., whom I prescribed for March 26, 1884, for gonorrhœal rheumatism, he had been unable to walk without crutches for over four months, having contracted gonorrhœa about five months previous to my treatment for rheumatism—while absent from home, with wagon and team, and camping out, perhaps caused, him to contract rheumatism along with the gonorrhœa. He was first treated by an old fossil, for the gonorrhœa, with the old "balsam cop'e;" treatment followed for three months with wine of colchicum, and hydrarg. chlor. mit. for the rheumatism. The only remedy I gave him internally, was manaca; commenced with gtts. xx. three times a day, and gradually increased the dose until he felt some effect from the medicine. He increased the dose until he was taking about two thirds of a teaspoonfal. The effect produced was a feeling of weakness and muscular tremors. I then ordered him to take gtts. xl. three times a day, and the tremor and weakness soon disappeared. He commenced to improve with the first dose, and in two weeks was able to go to work. Took about four ounces of medicine, and has never had any return of the disease.

Case 2.—MRS. C. has been afflicted with chronic muscular rheumatism for two months, getting worse all the time; not able to do any work.

Prescribed: Fl. ext. manaca, one ounce; dose 20 drops, three times a day. In a week all pain and soreness gone, patient felt well. One ounce of manaca taken. No return of the disease in six months.

Case 3.—MR. A. B., æt. 60, has had chronic articular rheumatism for two years, gradually getting worse; joints of right hand and fingers enlarged, sore and painful, aching of bones of legs and back. Ordered:

℞ Fl. ext. manaca, ℥ ij.
Sig. Dose gtt. xx. three times a day.

Commenced to improve immediately after commencing the use of the manaca, and he took one and a half ounces of the medicine and declared himself well, and has had no rheumatism since.—*St. Louis Med. Journal.*

THE TREATMENT OF ANEURISMS BY THE INTRODUCTION OF WIRE.—The comparative powerlessness of modern surgery to effect a permanent cure of considerable aneurisms as they occur within the body was markedly shown, says the Medical Press, and at the last meeting of the Royal Medico-Chirurgical Society, when DR. CAYLEY read a communication descriptive of a case of thoracic aneurism treated by the introduction of steel wire into the sac. The patient was a man, aged forty-eight, who entered the Middlesex hospital June 5, 1885, a pulsating tumor having appeared in his neck five days previously, symptoms of thoracic aneurism having been present since November, 1874. TUFNELL'S treatment and large doses of potassium iodide were tried without result, and on June 24th MR. HULKE introduced into the tumor, through a fine canula, forty feet of steel wire. Subsequently a second introduction of wire, thirty-four feet nine inches long, was performed by MR. PEARCE GOULD, in an endeavor to arrest urgent symptoms, but death occurred soon after, during a paroxysm of dyspnœa. No constitutional disturbance followed either operation. The discussion which ensued on the conclusion of the paper was both instructive and interesting, and exhibited in marked contrast the different opinions as to the value of operative interference held by physicians and surgeons respectively. DR. GEO. JOHNSON'S contention, however, that there is danger of local irritation, ulceration, and embolism, associated with the introduction of wire into aneurisms, was not borne out by the history of DR. CAYLEY'S case, although an instance was cited by DR. PAUL, from the records of the Madras Hospital, in which signs of inflammation were produced by the introduction of horse-hair. MR. BARWELL made a solid contribution to the discussion in the shape of a list of eight cases in which the mode of treatment in question had been adopted, all terminating fatally; but he contended that as yet the value of the proceeding could not be fully estimated. The most cheering view of the situation was taken by Messrs. Bryant and Holmes, who both succeeded in extracting crumbs of comfort from the seemingly hopeless accounts of successive failures; and MR. HULKE, while condemning such methods as electrolysis and administration of ergot, also appeared to look forward with a certain amount of confidence to the future development of the plan of treatment by foreign substances in the the aneurismal sac.—*New York Medical Record.*

Benzoate of Soda in Cholera Infantum.—The fact is well known that during the summer cholera infantum appears almost as an epidemic in our large cities. Dr. Guaita (Allg. Wien. Med. Ztg., 21, 1886), has made a special study of this disease, and come to the conclusion that it is due to a special microbe, which in some way enters the system and then becomes pathogenic, if the conditions are favorable to its development. This is shown by the fact that the summer complaint of children, especially of those who in consequence of their having been nourished by the milk from the breast of their mother or wet nurse possess a healthier alimentary canal, is often easily controlled, if treated correctly at the very start.

Guaita's observations refer to 53 cases at the age from six months to two years; 35 had been sick from 24 to 30 hours; 18 from 6 to 14 days. In the first recovery occurred within from 4 to eight days; in the last in average within 21 days; no death. The so successful treatment consisted in the following:

First a mild laxative (calomel, jalapa); then from 64 to 96 grains of benzoate of sodium in 4 oz. of water per day; the third day again a laxative (manna, magnesia), then once more benzoate of sodium in same doses, the size of the latter being regulated more by the age of the child than by the urgency of the symptoms. Already the second day an improvement is noticeable in the alvine discharges; the fœtid odor ceases, also the vomiting. During the treatment no food whatever must be administered; only a little lemonade and good wine. Milk and beef-tea are especially forbidden, as cow's milk ferments too easily in the stomach; infants may be given the breast four times in 24 hours.

Unless further observations prove the contrary, the omission of all food may perhaps have as much to do with bringing about the favorable result as the remedy mentioned, benzoate of sodium; for of late years we have been in the habit of adopting the same stringent measures, and have obtained a uniformly good result, confining ourselves as regard medication simply to laxatives—sulphate of sodium and mild astringents. Still, the fatality of cholera infantum in large cities during the summer is so great, that any remedy promising the least success should be welcome. It may well to give the benzoate of sodium a more extended trial.—*Med. and Surg. Reporter.*

Silicate-of-Sodium Jackets.—Dr. S. T. De La Mater, writing in the New England Medical Monthly, says that he has found sodium silicate a most excellent substitute for plaster of-Paris in the treatment of lateral curvature of the spine in Pott's disease. In using it for the jacket in spinal disease, he first fits the undershirt snugly to the body, and over this places a thin layer of cotton wadding. He he then rolls one layer of a plaster bandage around the body, and over all three or four thicknesses of cheese-cloth saturated with silicate of sodium. The chief advantage of this application is its lightness, the jacket so constructed not weighing more than six or eight ounces, and yet being sufficiently firm to give perfect support. Dr. De La Mater cautions his readers against potassium silicate, which is often substituted for the sodium. The latter is, when pure, of a light amber color, having the consistency of syrup, while potassium silicate is pale white.—*N. Y. Med. Record.*

The Best Vehicle for Quinine Administered to Children.—Dr. Keener says (New England Med. Monthly): "Until the syrup of yerba santa was put upon the market I had great trouble in finding a suitable vehicle for the exhibition of quinine to children. While the licorice and the ulmus preparations and the tannic acid formula were measurably useful, they were inadequate, when large doses were given, or when the quinine was to be used for a considerable time. I depended on its use per os till the stomach had become tolerant to a solution of quinine in water and sulphuric acid, and then resorted to its use per enema. My experience with the syrup of yerba santa is such as to warrant me in saying that it deserves the confidence of the profession as a menstruum whereby the sulphate of quinine can not only be rendered tasteless, but absolutely palatable. Five grains of quinine is rendered tasteless in one drachm of the syrup." It is prepared by Parke, Davis & Co.

Bismuth Salicylate.—A paper was read on the above subject before the Medical Society of Berlin on the 3rd. inst., by Herr Sulger. After employing it in a variety of affections for several years, the author was able to speak with assurance of its action. He had found it especially useful in chronic diarrhœa, including the tuberculous form, in reflex neuroses arising from chronic intestinal mischief, in diarrhœa from error of diet, and in that of nervous origin. No serious untoward effects were observed during its employment, and when slighter presented themselves they were in every case removed by a small dose of castor-oil. The dose he gave now was smaller than that given at one time, and was found to be equally successful. He usually gave it in the form of a powder along with an equal quantity of sugar of milk. His usual formula for administration was as follows: Bismuthi salicylat., sacchar. lact. 25 grm. M. Divide in partes æquales xl. One to be taken every three hours.—*Med. Press.*

Calabar Bean in Epilepsy.—Herr Rush, of Fritzlar, recommends the use of Calabar bean in epilepsy in cases in which other drugs have failed. The formula he makes use of is as follows:

℞ Ext. fabre calabar., gr. viiss;
Spiritus etheris, ℥80;
Aq. menth. pip., ℥300.
M. Ft. mist.

Five to ten drops three times a day for children; eight to 15 drops for adults. For children he begins with five drops, and increases the dose by one drop daily until the maximum dose of ten drops is reached. He then diminishes the dose by one drop daily until the initial dose is reached. He records some successful cases in the *Deutsche Med. Zeitung*, No. 38, 1886.

THE INJECTION OF OIL OF TURPENTINE INTO OLD SINUSES.—CECCHINI ("Annali universali di medicina;" "Abeille méd.") reports a number of cases in which he succeeded in causing the closure of old sinuous tracts by injecting into them a few drops of oil of turpentine with a common hypodermic syringe. The best results, he says, are obtained when the drug is used pure, but it may be used with some bland oil, or even with a solution of morphine, as the pain is sometimes considerable. By this simple treatment the author has cured five anal fistulæ and six sinuses connected with carious bone. The turpentine is thought to exert a stimulating action on the walls of the sinus, whereby healthy granulation is promoted.—*N. Y. Med. Journal.*

Our Advertisers.

BUSINESS NOTICES.

THE USE OF LACTATED FOOD.—DR. J. MILNER FOTHERGILL writes concerning lactated food, which is said to consist of the purified gluten of wheat and oats, with barley diastaste and malt extract combined with a special prepared milk-sugar.

Such a food can be added to milk. So prepared with milk it forms an admirable food for infants and dyspeptic persons who require very digestible aliments.

But it has a wider range of utility. The body temperature is kept up by the combustion of grape-sugar. Grape-sugar is supplied from carbo-hydrates, either the insoluble starch or the soluble sugar. Starch forms a great portion of our food, and is converted into grape-sugar within the body. Where the system is unequal to the digestion of starch, as in feeble digestion or conditions of acute disease, then predigested starch must be furnished to the organism. Otherwise the system will perish of exhaustion, just as a fire dies out when its fuel is consumed.

Beef-tea contains nothing which can form grape-sugar, and, in fact, is a pleasant stimulating beverage or food adjunct, but without food value practically. (For what food value it has is so infinitesimal that it is not worth counting). But when it has added to it a food such as lactated food, it has a distinct measurable food value. Consequently, such food should be given with beef-tea, and the compound forms a valuable food.

When lactated food is placed in water hot enough to be sipped, a rapid transformation of the starch remaining in it (by the diastase it contains) goes on; and a nutritive fluid is the result which requires but a minimum of the digestive act.

Such fluid can be flavored and drank as a nutritive beverage, specially acceptable in febrile conditions. Flavored with lemon, ginger, cloves, or other flavoring agents, to give rarity—a matter far too much neglected in ihe treating of the sick—it can be largely used, Or wine, either red wine, as claret, or sherry or port, can be added to it when a little stimulant is required, and brandy when a stronger stimulant is indicated.

The resort to farinaceous matters, predigested, must become greater and greater as our knowledge of digestion and its derangements waxes larger. It is not merely in the case of feeble infants that such predigested starch and milk-sugar are indicated and useful; persons of feeble digestion require these soluble carbohydrates, which they can assimilate.

But an equally great matter is the feeding of persons acutely sick, and especially where there is pyrexia, who now are allowed to perish of inanition on the mistaken conviction that beef-tea is a sustaining food. It is in the sick-room that soluble carbo-hydrates have a great future before them.

A VALUABLE REMEDY FOR DIARRHŒA AND DYSENTERY.—The intestinal catarrhs so prevalent during the summer months make up a large proportion of the practice of every physician. While the treatment of this class of affections must necessarily be modified to suit the stage of the inflammation and the idiosyncrasies of the individual case, there are, nevertheless, certain symptoms, common to all cases which may generally be relieved by a remedy which has been extensively used in Europe and in this country with the most gratifying success. We allude to chlor-anodyne manufactured by PARKE, DAVIS & CO. Chlor-anodyne is an improvement upon the proprietary preparation which under the name of chlorodyne was introduced into England by DR. J. COLLIS BROWNE, and was widely used and commended by physicians of the highest standing. Chlor-anodyne is a happy combination of anodynes, anti-spasmodics and carminatives. It is a diaphoretic, anodyne and astringent in its action, and intelligently administered has almost a specific action in diarrhœa and dysentery. Each gram (an ordinary adult dose) contains:

Morphine muriate	.0060	grams.
Tincture cannabis indica	.0800	"
Chloroform	.1350	"
Oil of peppermint	.0025	"
Tincture capsicum	.0025	"
Hydrocyanic acid	.0170	"
Alcohol	.3000	"
Glycerin	.4570	"

Those desiring literature more fully descriptive of chlor-anodyne should send to PARKE, DAVIS & CO. for their interesting working bulletin relating to this preparation.—*Physician and Surgeon.*

A NEW PEPSIN.—Research in the direction of digestive ferments has shown great activity in the past few years, and the results have been no less important than surprising. The latest achievement in this direction is the production of a pepsin of astonishing digestive power. The power claimed is that one grain of the pepsin will dissolve from 1,200 to 1,500 grains of coagulated albumen! The certificate of an eminent chemist is before us, stating that in his hands it has proved the most active ferment, one grain easily dissolving 1,000 grains of egg albumen; and that it shows a uniformity of strength not found in the commercial articles. This article is the result of two years' research and experimenting, at an expense of some thousands of dollars, in the laboratory of WM. F.

KIDDER & Co., of New York. The name of the new product is "Kidder's Crust Pepsin." It was the object of the experimenters to produce a pure pepsin, free from acids, salt, sugar of milk, mucus and peptones, and they congratulate themselves on producing an article that is pure, and possessing a digestive power far beyond their most sanguine expectations. Another point in its favor is that it is not hygroscopic and can be kept in any climate. Its taste is not in the least disagreeable. It can be diluted to any desired strength by trituration with sugar of milk. So great is its concentration that one part of the pepsin to 19 parts of sugar of milk makes the officinal saccharated pepsin of the U. S. P. The importance of such discoveries as the above to the medical profession is very great. Practical medicine owes much to the investigator and experimenter. That this new aid to those "in the ranks" will be rapidly "pressed into service" is a foregone conclusion.—*Medical World.*

J. LINDSAY PORTEOUS, M. D., F. R. C. S. M. R. C. P. ED., in the April No. of the Edinburgh Med. Journal, says: Of late there has been a great influx of new drugs, some of great value, others of little or no use. Where a medical man has an extensive practice, consisting of rural and urban patients, he has ample opportunity of testing the effects of drugs, as the varieties of disease that come under his notice are great; and although his means of watching the action of drugs are not so good as in hospital practice, yet a good deal can be done if he cares to take a little trouble to "take notes."

The following is one which has been used for some time by my colleague (DR. PROUDFOOT) and myself, and I give the results:

About eighteen months ago a friend of mine from America told me of the wonderful effects of a medicine, much used in the States, called bromidia. According to the makers, it is composed of:

Chloral hydrate, 15 gr.
Potassium bromide, 15 gr.
Ext. cannabis indica, ⅛ gr.
Ext. hyoscyamus, ⅛ gr.

I obtained some, and have ordered it regularly for over a year; and have found it excellent in the pain of rheumatism, pneumonia, and cancer; also in the sleeplessness of scarlatina and alcoholism. It has never failed me in procuring sleep, without the disagreeable dreams and after-effects of opium. The dose is ʒ ss to ʒ j every hour till s'eep is procured. I have also found it of much service in cases of tonsillitis, used as a gargle with glycerin and carbolic acid.

DR. C. F. DENNY, of St. Paul, Minn., reports in the North-western Lancet the following case of grave infantile mal-nutrition relieved by CARNRICKS' soluble food:

Not long since I had brought to me a child of six months. suffering from the following symptoms:

Constipation, at times irregular action of the bowels, regurgitation of food and an asthmatic cough. Its mouth was full of thrush sores. and its appearance one of poor nourishment.

It had been given a number of Infants' Foods in vain, one of which I prescribed myself.

By means of mild medication, directed towards the cough and stomach, something was accomplished. Finally I gave "CARNRICK'S Soluble Food," and had the satisfaction of having it retained, and at last accounts the child was doing nicely.

I am inclined to think this food is worthy of attention on the part of the profession.

It recommends itself in that it contains caseine, rendered soluble by pancreatine, starch converted into dextrine and maltose. Hence it requires but little preparation, and that is so simple, mistakes cannot occur.

It requires no addition of milk.

It has the advantages and none of the disadvantages of the many other foods now in the market, and forms a nearly physiological substitute for mother's milk.

The Medical Summary publishes the following letter from DR. LIVEZEY, commenting on the value of lactopeptine in a case of great debility attending a complication of maladies:

"While wintering in Florida, I met with my annual patient, a young lady of 28, from Chicago, who was sent hither three or four years ago in order to pass out into the "spirit land" comfortably, who was now being troubled with poor appetite, a slight but distressing nausea, great debility, irregular menstruation, excessive cardiac action on the least exertion, etc. I ordered 1 oz. bottle of lactopeptine of the New York Pharmacal Association's manufacture and she improved at once. Soon after, she met a lady friend, who told her she ought to take lactopeptine, stating what wonders it has done her, who was troubled "just the same way" (of course). "Why. bless me," said my patient, "that is just what my doctor prescribed for me, and I am doing nicely." By the time she finished the small vial she declared she never felt better in her life, her appetite being regular and everything O. K.

N. B.—She has taken since lactopeptine. elixir, calisaya, iron and bismuth, with excellent results.

AGNINE, A NEW OINTMENT BASIS. — We have before alluded to lanolin, a mixture of cholesterine fat (from keratin-holding tissues, such as sheep's wool in particular) and water. DR. OSCAR LIEBREICH read a paper on lanolin before the Berlin Medical Society, in which he showed the great advantages of this product over vaselin and other fats used for the base of ointments.

We learn that MESSRS. METCALF & Co., of Boston, appreciating the importance of an ointment base which would not rapidly decompose, and which could be easily and speedily absorbed, have introduced, under the name of agnine, an improvement upon lanolin.

Agnine is the pure fat of lamb's wool. It is not mixed with water (as lanolin), and will, no doubt, be preferred to the latter preparation.

—*Exchange.*

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Original Articles.

THE MEDICO-LEGAL ASPECT OF INCINERATION.

BY HUGO ERICHSEN, M. D.,* DETROIT, MICH.

The medico-legal objection, as it is called by the enemies of cremation, does not apply in every case, since every day individuals die of easily-determined causes, such as small-pox, consumption, hæmorrhage from the lungs, drowning, other accidents, and suicide, in short, in such a way as to place the cause of death beyond cavil and dispute.

It is true that a regular proportion of bodies is dug up every year on suspicion of foul play, but how many of these cases justify the exhumation? So uncertain and inaccurate is the post mortem evidence of criminal poisoning, that no bodies were exhumed for forensic purposes in Vienna since 1805. TARCHINI-BONFANTI for 26 years the perito-medico (medical expert) at the tribunal of Milan, Italy, avers that during this time, although many thousands of litigations came before the court which was requested to pronounce judgement upon them, only in ten cases was it necessary to resort to disinterment. Only ten cases in 26 years, out of several thousands of lawsuits! And four only out of the ten exhumations, led to the detection of the crime and the criminal. These four cases occurred in a single litigation—that of BOGGIA. In this instance, the disinterment would have taken place even if cremation would have been at the time an established and universal custom, for BOGGIA had buried his victims in his own cellar.

TARCHINI-BONFANTI asserts that exhumations for forensic purposes are extremely rare in Italy, and that those which take place yield either negative or, at best, doubtful results.

Disinterment, instead of furnishing an explanation, instead of shedding light upon some mystery, oftentimes is followed by confusion. The statement, I have just made, brings to my mind the celebrated poisoning case of MADAME LAFARGE, which happened many years ago in France, and is now well nigh forgotten. This instructive case, I am sure, will elucidate my assertion.

MONSIEUR LAFARGE, having buried his first wife, hunted for a second with a little money to relieve him from his financial embarrassments. As no one that knew him or his circumstances would procure or entrust to him the happiness of a female, he was obliged to have recourse to a marriage agent, a M. FOY, who kept a female slave-shop in the centre of civilization, and sold ladies in marriage to the highest bidder. Poor MARIE CAPELLE was an orphan, with a fortune far beneath the usual property of young ladies in her sphere of life. She was a beautiful young girl, with regular features and jet black hair. She played excellently on the piano, and had a delightful voice. Her singing is said to have been of a very superior kind. She was well versed in more than one science, read and translated Goethe with great facility, spoke several languages, and improvised in Italian verse with the same grace and pureness of style as in French verse. MARIE CAPELLE, in short, was a rare exotic plant in the bosom of the simple domestic virtues of a Limousine education. Full of religious sentiments and refinement, this unfortunate woman was destined to meet with a fate worse than death. She had no offers of marriage in her own circle, so that her aunt was glad to close with the first offer proposed by M. Foy, the marriage agent. What was the poor orphan to do? Refuse the man? But she had no objection to allege against him. He was old and ugly; that did not alarm her. But his temper, his avarice, his rudeness, his lone and deserted country house, which even the poor curate shrunk from as worse than a cloister, how could the victim know all this till she experienced it? She submitted, therefore, to the fate of every young French woman of that period, that is, to take the husband which her guardians provided. On the road, however, she discovered the terrors of her situation, and arriving at Glandier, tried to break loose from it. She acquainted her spouse frankly with all she suffered and all she felt. The husband, however, cared little whether his wife loved him or not. To keep his little purchase, and her fortune, was all his aim.

Some time after the marriage, Lafarge died suddenly, and under suspicious circumstances. His wife, suspected to have poisoned him, was imprisoned. So great was public sympathy for

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her that even such a callous individual as the conscierge of the Palais de Justice gave up his own room to her. Here she was incarcerated during the trial, with the faithful servant who attended her in her prosperity, and would not abandon her in adversity. At the trial, which came off at Tulle, it was shown that the deceased had on one occasion actually attempted to take away his own life, but being discovered in the act was prevented. Lafarge was exhumed, and his body subjected to a chemical examination by M. ORFILA, the noted Parisian toxicologist, who was assisted by two other chemists. These gentlemen, by certain experiments, obtained arsenical spots on porcelain saucers. The jury thought that the imponderable quantity of arsenic which appeared upon the plates necessarily proved that arsenic had been used to poison the deceased. This quantity was estimated by M. ORFILA at half a milligramme, DR. RASPAIL, who was no less noted than ORFILA, estimated it at less than the hundreth part of a milligramme. DR. RASPAIL alleged that the quantity was far too small to denote that LAFARGE had been poisoned, and that it might have proceeded from the test which M. ORFILA brought with him from Paris. DR. RASPAIL, who was summoned from Paris by the defense says:

"I saw in the office of the registrar three plates, which had been deposited by M. ORFILA, and took a minute description of them, and then consulted other chemists as to his mode of operation. The first and second plate were the result of the action of nitric acid, but the stains which they exhibited were so very small and undefined, and the indications produced by the tests were so equivocal, that I should hesitate to declare them to be arsenic stains. As to the third plate, the stains may be declared to be arsenical, but I have many serious observations to make on this point. The stains of the first and second plate are small, of a yellowish gray; each of them appears like a mere breath. Those of the third plate are large, blue, and shining in the center, and of a violet yellow at the edges. But—and pray attend carefully to this—they were only made so by the use of nitrate of potassium, which M. ORFILA had the precaution to bring from Paris. Upon the observation made to him by some of the chemists, and particularly those of Limoges, that perhaps the nitrate of potassium was not pure, M. ORFILA replied that he had tested its purity. But, as the chemists persisted in demanding an analysis, M. ORFILA, driven to his last entrenchment, said, that if this experiment appeared doubtful to them, he was disposed to abandon it. Then, said M. BUSSY, we must also abandon the first and second plate, for they alone could not constitute the basis of an accusation of poisoning. These admissions appeared to the hearers to be so grave and extraordinary that I have been authorized to publish them. I told the chemist from whom I have these disclosures, that it would be necessary to push our investigations further, and I asked them if I might examine the tests, left by M. ORFILA, at Tulle, in presence of an officer of justice. They replied that M. ORFILA had left all his tests in the hands of M. DORIES, the chemist, except his potassium, his zinc, and the nitrate of potassium, by means of which he had obtained the stains upon the third plate."

Granted even that M. LAFARGE died in consequence of the presence of arsenic in his stomach, the connection of his wife was in no way demonstrated.

It transpired, at the trial, that the deceased had been a most disreputable ruffian, who had made a most fraudulent representation of his position in life, in order to carry his designs upon MARIE CAPELLE into execution. His family seems to have been hardly more respectable. In view of the testimony, pro and con, one would naturally expect that such an ill-designed case would have been dismissed by the court, or that the helpless, sorrowful, and forlorn widow would have been acquitted, for even those who believed her guilty were convinced that the evidence was insufficient to convict her. Nevertheless, she was held guilty of murder, and condemned to hard labor for life and exposure in the pillory.

There are many poisons which, by a rapid change of their substance, are extremely difficult to detect, even after a short time, sometimes but a few days, for instance, cyanide of potassium, prussic acid, and, at certain times, phosphorus.

I think that I may safely affirm that it is impossible for the best of anatomists to determine the lesions (superficial ones at least), if any there be, of a decomposed body.

All vegetable poisons, except the alkaloid of strychnine, decompose with the body, and it is extremely rare that any alkaloid can be discovered in the body post-humously. Mineral poisons, such as antimony, lead, copper, combinations of baryta, and many others, are indestructible and can be detected in the ashes. It may even happen that, by some extra care, the process of incineration may be the most efficient means of detecting poisoning by arsenic and mercury. Of course, we should not forget that without some precaution, the salts of arsenic and mercury would be volatilized, but whilst they are volatilized, they must also, at a reduced temperature, be again deposited, and it remains for the chemist to determine the most efficient contrivance for recognizing their deposition.

SIR HENRY THOMPSON, BART., in his admirable exposition of cremation, which was translated into almost every civilized language of

the world, thus disposes of the medico-legal objection:

"It has been said, and most naturally, what guarantee is there against poisoning if the remains are burned, and it is no longer possible, as after burial, to reproduce the body for the purpose of examination? It is to my mind a sufficient reply that, regarding only 'the greatest good for the greatest number,' the amount of evil in the shape of disease and death, which result from the present system of burial in earth, is infinitely larger than the evil caused by secret poisoning is or could be, even if the practice of the crime were very considerably to increase. Further, the appointment of officers to examine and certify in all cases of death would be an additional and very efficient safeguard. But — and here I touch a very important subject—is there reason to believe that our present precautions in the matter of death certificate against the danger of poisoning, are what they ought to be? I think it must be confessed that they are defective, for not only is our system inadequate to the end proposed, but it is less efficient by comparison than that adopted by foreign governments. Our existing arrangements for ascertaining and registering the cause of death are very lax, and give rise, as we shall see, to serious errors. In order to attain an approach to certitude in this important matter, I contend it would be most desirable to nominate in every district a properly qualified inspector to certify in all cases to the fact that death has taken place, to satisfy himself as far as possible that no foul play has existed, and to give the certificate accordingly. This would relieve the medical attendant of the deceased from any disagreeable duty relative to enquiry concerning suspicious circumstances, if any have been observed. Such officers exist throughout the large cities of France and Germany, and the system is more or less pursued throughout the provinces. In Paris no burial can take place without the written permission of the "Medecin Verificateur;" and whether we adopt cremation or not, such an officer might, with advantage, be appointed here."

Sir Henry suggests that in suspected cases the "dead officer" should retain in sealed vessels, the stomach and other portions of the viscera for future examination. But I think it next to impossible that such an officer could execute duties so burdensome and so averse to the genius of the people.

Let us, for a moment, turn to our dear American commonwealths. Do our burial laws aid in the detection crime? In the majority of states a death certificate signed by a physician, must be filed with a health officer, who issues a burial permit. That is all that is required. Generally it makes no difference whether the physician or surgeon who affixes his name to the document, is reputable or not. The burial-permit is looked upon as a mere formality, an unnecessary institution that owes its origin to some whimsical law-maker. How often do the most zealous of health officers investigate the causes of deaths that are reported to them? The doctor's certificate is put upon record, that is satisfactory, and no more is asked for. The rest is silence—like that which reigns under the turf where the undetected victims of the poisoner lie. Now, if our faulty burial laws, if the indifference of our officers of health, are not a direct incentive to the foulest and most insidious forms of crime, I do not know what is. Were I a secret assassin, I certainly would wish for no more encouragement. As matters now stand any evil-doer, with the help of some unscrupulous medical man, may commit murder daily without fear of detection.

I propose to show that if incineration were established, the careful scrutiny of corpses, and official examination in suspected cases that would precede the reduction of the body to ashes, would greatly assist in the detection of murder

Mr. Wm. Eassie, in a lecture delivered at the International Health Exhibition last year, expressed himself anent this question as follows:

"With regard to doubtful deaths, it would be necessary to make sure that the body exhibited no traces of poison, or that certain small portions of the body should be removed therefrom and kept for a few years. For instance a small portion of the stomach and intestines and their contents, in case of vegetable poison, and a small portion of the liver should mineral poisoning be suspected. There is no difficulty in dealing with this matter in other countries where cremation has become permissive; and it is upon record that the examination of the body of a child in Italy, which had been made in the ordinary way demanded by the authorities previous to the cremation, proved that the child had been poisoned, apparently by sweetmeats, and this would not have been revealed had an ordinary burial in the earth resulted."

I must here repeat what I have already said regarding Sir Thompson's intimation that parts of the bodies about to be cremated might be conserved for future examination. The strong dislike of the public would never allow of such a measure.

To cut a long story short, let me say that cremationists meet the medico-legal objection by a demand for a careful inquest over every dead body, and a post-mortem examination, including the chemical analysis of all the viscera, in every instance in which death by toxic agents is suspected.

In many cities of Europe the dead are examined by physicians appointed by the govern-

ment. The result has been that, as, for instance, in Dresden, Leipzic, and Frankfort, Germany, no exhumation took place after the inquest became obligatory, and was practiced in every instance of decease.

In Bavaria, Saxony, Nassau, and Baden, there are regular coroners, whose duty it is to inspect every corpse, while in England the coroner's jury convenes in cases in which the cause of death is not apparent.

With us the office of coroner is not an important one. Generally, laymen are appointed to it—men who have done some work at that awful power, the political machine. This is wrong. The office of coroner should only be vested in medical men, and only in such as have shown that they are qualified to fill such a position of consequence. Every candidate for coroner should be examined in forensic medicine and pathology, and should give a demonstration of his capability to make a thorough autopsy. Only those who have graduated from a medical school of good repute, recognized by law and all the boards of health of the country should be eligible.

The coroner should have the power to demand an explanation of the cause of death from the physician who attended the deceased in his last illness, and, whenever such explanation is unsatisfactory, or there are other reasons which lead him to suspect that the defunct has been foully dealt with, to order a complete post mortem examination. He should furthermore have the right to summon before him any witness whose testimony might clear up the case in hand.

To make this scheme successful, it is essential that the practitioner of medicine, who assumes the coronership, should receive adequate payment for his services, such remuneration, in fact, as would enable him to give his whole time and talent to his office.

Beside the advantages which I have already indicated, a system such as this would doubtlessly enrich the mortality statistics as well as forensic medicine and pathological anatomy. That it would be an efficient safeguard against crime, I think, every unprejudiced person will admit.

THE DIETETIC TREATMENT OF DISEASE.*

BY W. T. DAWSON, M. D., NEW YORK, N. Y.

It has always seemed very strange to me that the study of food in its relation to disease should receive absolutely no consideration in a medical education. When compared with the great developments in medicine of late years, our knowledge on this subject is lamentably deficient; indeed, I might say that no two of us have clearly-defined or well-established and harmonious views on this subject. Surely, it is a reproach to medical men that such should be the case. The scramble for reputation as men of science, learned in all the niceties and useless refinements of germs, and antisepsis and theories *ad libitum*, has left no room for such homely topics, either in our studies or practice.

There is no need to discuss the why and wherefore of such a state of things, for the fact is patent enough; and if we have, at last, recognized our failings in this particular, it behooves us, as practical, as well as scientific men, at once to set about the remedy.

The subject is worthy our best efforts, and its importance, in my mind, is not second to to that of medication. The reputed father of our craftrecognized it when he said: "The art of medicine would not have been invented at first, nor would it have been made a subject of investigation, if, when men are indisposed, the same food and other articles of regimen, which they eat and drink when in good health, were proper for them;" but I fear his successors have never lived up to such sound suggestions. Take up any text-book or periodical, and examine the treatment of almost any trouble. The diversity of opinion, the absolute contradictions as to treatment, the emphatic assertions that such and such procedure is the best, and withal, the variety of results attained in any given case, are appalling! One man will cauterize a diphtheritic throat as if he were branding cattle; and if the case recovers in spite of him, "behold! a brilliant success, the only correct treatment," etc. Should the child die, "Well, that is what we must expect; and all our skill and science have been futile, though, of course, not in any contributory sense." Another denounces this treatment; and by his own gentler, but equally empirical methods, reaches pretty much the same conclusions. The want of unanimity amongst the great lights of the profession is the first stumbling-block in the path of the tyro, nor does he apparently come nearer a solution of the riddle as his knowledge increases.

This is no simple matter of individual judgment as might at first appear; its cause lies far deeper and argues a serious weakness in the symmetry of medical practice and development. Our pathology has grown at the expense of our treatment; and, instead of their marching hand in hand, how often do we hear it said of so and so, that "he is a very scientific man, a wonderful pathologist;" and of another, "his pathology is not all it should be, but he is an excellent doctor," etc. There is unquestionably a large gap to be filled up between our theory and practice, which seems to yawn almost as widely now as formerly. The salutary influence of the bromides in epilepsy is rarely more than a modifying one; but, despite

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our certain knowledge, we go on loading up the poor wretch, thus doubly afflicted, till, saturated with the remedy, he actually overflows into acne, impaired general health, melancholia, sometimes even dementia or imbecility; the convulsions continue, and we charge them with the damage done, but I doubt if we could prove our case. It is unnecessary to multiply illustrations, for there is hardly a case in the whole catalogue of diseases, which would not equally well convey my meaning.

Just here let me say, by way of parenthesis, that I think it most unfortunate that tradition and custom should ever have come to play so large a part in the practice of physic. I see no cause for conflict between our proper reverence for the antiquities of medicine, as of art, and that conservative independence of thought and action, without which no progress is possible. But I do think we are often unconsciously led along certain lines by the dicta of others, based on insufficient grounds; and, although often difficult and sometimes dangerous, it is no less the duty of every man to justify his conduct, as far as possible, on his own evidence and responsibility.

I would not, however, be misunderstood as condeming, in a wholesale way, all medication. Happily we can point to a few specifics as one of the great glories of medicine. Nothing will take the place of quinine in fevers of malarial origin; but it does not follow that we can reduce temperature of other states with it, nor can we, unless it be given in quantity sufficient to injure the patient. Yet how often is this very thing done, either with some foolish hope that it may, or from an equally pernicious notion that some antipyretic medication is indicated and necessary. The fact that iron enters so largely into the composition of healthy blood and tissue, certainly does not argue that our capacity for such blood-making is unlimited; but I have known its administration in drachm doses every hour, advocated and practised on the supposition, I imagine, that it would miraculously prop up the declining strength, pretty much as it supports the elevated railroad.

The self-limited nature of disease furnishes our best argument against much medication. I do not believe in the abortion of an essential fever, except it be in the sense that judicious treatment greatly modifies its severity. They must and will run their course, and, just in proportion as we recognize this fact and guide our patient over the rocks and shallows, our success will be.

Take, for example, any acute disease, where high temperature and excessive tissue waste are the chief indications to be met, as in typhoid fever. I assume, to begin with, that no drug so safely or effectually reduces and keeps down the fever as the bath, whether of cold or tepid water, regularly applied, or water and alcohol sponged over the service. Any one who has sat by the sick bed and seen the delirium of fever give way to the calm, refreshing sleep that follows a sponging of the surface, must admit its good effect; and, during sleep, nature has a chance to recover herself and renew the struggle on more even terms. What is, then, our next most urgent need? Simply to sustain the strength of our patient while nature—the true *vis medicatrix*—heals the wound. Here you have the whole treatment of typhoid.

But I hear some one asking, "what have all these commonplaces to do with diet?" Simply this: To plead for less medicine as an introduction to more judicious, discriminating and scientific feeding. The use of drugs must be in a measure necessary so long as disease exists, but our therapy is and must be a variable quantity until we make medicine an exact science.

As we come to discover the source and action of our medicinal agents, we wisely set aside the old, nauseous, cumbersome potions, boluses and mixtures, which have grown to be the synonym for "Allopathy," and adopt the more efficient and easily administered so-called active principles in concentrated form and strength, to say nothing of the hypodermic and inunction methods now advocated by some to the exclusion of drugs by the mouth.

Nor are these refinements, remedially speaking, merely a passing fashion, but are, more or less, the result of the demands of physician as well as patient. The doctor has been dosing his patient with all sorts of fantastic compounds since time began, until the poor, long-suffering stomach has ceased to have scarcely any other function than that of a receptacle for mixtures which the more discriminating system at large has refused to accept, and what is the result? Why, none in very many instances, except that tired nature at last gives up to the unequal struggle and feebly protests in dyspepsias, unlimited in form and variety, perversions of nutrition and functions of all sorts, and general demoralization, worse than the original malady. He has labored according to his lights with various wisdom and perseverance worthy of a better cause, but his patient does not get well, and he is only perplexed to account for the want of harmony between his scientific reasoning and the actual facts in the case.

The old blood-letting, purging, depleting—often starving system—or, as Lady Chettam would call it, the "lowering plan," has passed into the curiosities of medicine, never to be revived; but contrary to the law of re-action, the pendulum has not yet swung to the other end of its arc.

By dietetic treatment I mean all that the

word may imply, provided that we feed with the same keen reasoning that we apply to the elucidation and harmonizing of clinical facts and theoretical arguments. Feed, when indicated, to the utmost limit of the power of the system for assimilation; in other cases with more moderation, but no less logically and persistently; while there is still a large third class that, I doubt not, may often be physiologically starved in certain directions, with happy results. In short, in general terms, all disease may be considered as sthenic or asthenic—"something less than life," as Hughes Bennett cleverly put it—according to the most modern research which reduces it to a perversion of nutrition, a definition which is itself pregnant with suggestions for our guidance.

The ancient Arabian treatment of syphilis by starving the poison out of the patient was a heroic example of dietetic treatment: yet I can fancy there may be cases of various kinds where such procedure might be proper and beneficial. As our specifics were then unknown, such treatment seems intelligent and rational. Have you not frequently seen one of those persistent, racking neuralgias—the so-called sick headaches of nervous, anæmic, poorly-nourished women—yield at once to a generous and full diet of the most nutritious kind, after resisting all remedies, locally and internally? It is often very difficult to induce a patient to eat as a therapeutic measure, and the physician often imperils his practice by such advice.

Our distinctively American disease, dyspepsia, will best illustrate my notion of dietetic treatment; and the extent to which it enters into most of our ailments, in some form, should make it doubly forcible. Let the variety be what you will; let the fault lie in a deficiency, or excess, or supposed faulty composition of any of the digestive fluids; let it be gastric, intestinal, or hepatic, or all combined, and I don't hesitate to say that, so long as the trouble is functional, it is curable, *but not by medicines.* Certainly the various symptoms may be more or less relieved and temporarily modified by drugs. But you will run the gauntlet of stomachics and anti-dyspeptics in vain; for cease your medication and your case is soon as bad as ever.

Now try the dietetic treatment, easily enough suggested, but much more difficult of application than the former. It requires not only self-denial, but great patience and perseverance, for it is no easy task to convince many people that drugs are totally unsuited to their particular case. Search out and find, as can always be done, what diet is and is not best for each case; make your rules absolutely inviolable and compel your patient to eat *only* what you order—all of which is feasible and not inconsistent with a wise regard for the patient's appetite and inclinations, for if you make eating a labor, you will largely impair its efficacy. Above all, insist on thorough mastication, slow and frequent eating, with the utmost regularity, and better four light meals a day than two hearty ones. Never allow the dyspeptic to satisfy his appetite, however palatable or digestible the food may be, bnt rather require him to stop a little hungry.

Here I must protest against the position not long since assumed by the late DR. FLINT. He says let the patient eat any and everything at all times and under all circumstances; in fact, consult his own fancy and the caprice of his appetite, and he gets the same results; that is, an implied not definitely specified case, in the nature of things the very best possible prognosis. This I consider both unscientific and irrational.

The one great difficulty is to induce the dyspeptic to eat at all; he loathes *all* food, and its mere suggestion is often sufficient to provoke a violent aggravation of his ailment. Does the doctor hold that the dyspeptic stomach is in a condition to receive and dispose of that which is its proper fuel, so to speak, when the machine is in complete working order? If so, where is the dyspepsia or indigestion? All reason and experience negative such views, and, were his position otherwise tenable, what becomes of all our proved and accepted physiology? On the contrary, it is just such unwise and indiscreet conduct which has brought about the existing condition. For example: Called to any given case of sickness, the average procedure is as follows: An elaborate pathological differentiation of the varieties of the type under consideration, a careful and generally correct diagnosis, minute details as to treatment and dosage, with a parting injunction in very general terms, to feed the patient well; give him all the milk he can drink, eggs, broths, soups, beef-tea, stimulants, etc., *pro re nata*, which actually means "according to fancy or convenience."

Now this, I hold, is all wrong, and without doubt an impediment to the successful battling with diseases. Our materia medica and diet being both so largely taken from the vegetable world, there is no reason why the two subjects should not receive equal attention; and I venture to predict that in the near future the scientific study and practice of this subject will very materially increase our ability to cure.

As a matter of fact, I am thoroughly convineed that the integrity of the whole digestive apparatus is our greatest safeguard against the invasion of disease, so that it is not unreasonable to infer that its restoration, when impaired, will also contribute, in great measure, towards the eradication of any complication or intercurrent morbid condition.

I will merely hint at the contrast of two epileptics, rheumatic, gouty persons; the one treated mainly with drugs (the usual practice), the other being fed first and drugged afterwards. It needs no pen-picture to set them off; such cases are encountered by us daily, but not as a rule.

As to foods: Their quality, quantity, method of preparation, and uses as a therapeutic means are yet an undiscovered country, an unknown factor in our practice.

LIEBIG'S division of food into tissue food and fuel food furnishes a good working basis for the study and practice of this subject. He holds that certain food constituents are consumed in building up tissues which are constantly wearing out and in need of repair, in health as well as in disease, while still others go to supply that force of energy or vitality implied in the mere fact of existence. Under the former head may be classed all nitrogenized, albuminous material, or that which being only slowly or partially oxidizable, requires more time and greater vigor of functions for its digestion and assimilation, such as meats.

FOTHERGILL says of beef-tea, which is as ever present in the sick-room nowadays, as it is generally useless, "it is a stimulant, not a food, from the presence in it of nitrogenized principles, which are past the tissue-stage, and therefore useless as 'tissue food,' while its 'fuel food' value is *nil;* to give it to the hungry man is to 'give him a stone when he asks for bread.'" This is strong language, and, perhaps, will provoke opposition, but physiological chemistry has rendered the verdict, from which there is no appeal. Beef-tea is nothing but a watery solution of those principles, for which there is no positive urgent demand in the acutely sick, to whom we are most accustomed to give it. What such a patient needs is "fuel food;" that which being quickly consumed, supplies the material to carry him over the immediate danger, and such are the hydrocarbons, fats, oils, starches, sugars, etc., articles rich in water and easily digestible.

Milk, combining all the various ingredients of the several classes of alimentary principles, is a typical food, of course; but there are conditions where even it is not admissible in its natural state, especially and unfortunately, those acute states, in which we are so apt to order it, and find on our next visit that it has been rejected by the stomach.

Without meaning to confine myself to fluids, I cannot omit the observation that I think our notions in regard to the use of water as an article of diet, are both crude and faulty. Being nature's greatest solvent and entering to such an extent as it does into the composition of all organic matter, it is very necessary that we should appreciate its importance and function in our physical lives. Perhaps some of you have noticed that there are certain persons who, for various reasons, drink very little water. My observation warrants the assertion that they are generally of poor physique, especially in respect to vitality and muscular development, but exhibit a correspondingly sensitive and highly organized nervous system. Their capacity for labor or fatigue is measured by their will power, and any disturbance of the delicate nervous balance is sufficient to induce grave disorder of the various functions of the economy as a whole. Undoubtedly that water should be taken freely is a normal demand of nature, and the idea (which I have often heard offered in an explanatory way) that it dilutes the digestive juices, interfering thus with proper digestion and assimilation, is shown by experience to be arrant nonsense. Let us be careful to put the blame where it justly belongs. for observation shows the free water drinker to be well-nourished and developed, functioning well in all particulars, strong and often a little too fat. I never restrict a patient's use of water, at a proper temperature of course; and instead of disagreeing, it is always grateful and seems to meet a want which nothing else can, liquid or solid.

In the matter of chronic disease, we have an equally inviting field. Pathology and the microscope have laid bare the mysteries of tissue, normal and abnormal; but here they desert us, except to stimulate our zeal for remedial agents; and it is quite possible that enthusiasm has dulled our perception and warped our judgment, since we unconsciously ignore our own teachings.

Our knowledge of the morbid processes of disease should prompt us to the adoption of every means to meet the indications: and, since drugs so entirely fail to supply our needs, may we not wisely invoke the aid of any other treatment which seems so plausible and promising.

I do not propose to discuss the chemistry of foods, but will only refer to the wonderful advances already made in the artificial feeding of the sick by means of the various beef extracts, peptic preparations, and foods of different kinds. They are a step in the right direction, but as yet, are only suggestive of their use. The work is to be done by the organic chemist and the physiologist, but they must fail in the end unless sustained by the enlightened observation and persevering applications of the practitioner.

A Cincinnati physician's death certificate stated that the subject "dide with Liver dease and New Monei." It is a little singular that this astute practitioner could not relieve his patient of at least one of these ailments. The victims of the latter are rare in these parts.

A FEW FATAL ABDOMINAL SECTIONS.

BY HAL C. WYMAN, M. D., SURGEON WEST END DISPENSARY, DETROIT.

The writer began the practice of abdominal surgery thirteen years ago. At that time but few men in Michigan advised opening the abdomen under any circumstances, except for the accumulation of dead house statistics. Now there is not a well-settled county, and but very few villages, in Michigan, without a practitioner who does ovariotomy, or opens the abdominal cavity whenever there is a probability of curing his patient by such means. The whole number of abdominal sections performed every year in this State must, therefore, reach some hundreds. Some of the cases result fatally. The most inexperienced operator is not more likely to have these cases than his experienced brother, whose fame brings all kinds — promising and unpromising cases — to his knife.

The mortality reports of the state give us little information as to the whole number of fatal cases occurring during the year, owing to the fact that the certificate of cause of death when returned by the surgeon only mentions in many instances the disease of which the deceased suffered, and says nothing about the treatment.

Hospital statistics are different, they report accurately the mortality causes, but hospitals are few in number, and but few of the whole number of abdominal sections made in the state are made in the hospitals. So there is no way of learning what proportion of all cases operated upon recover. The report of medical societies and medical journals almost invariably tell the bright side of abdominal section until the average medical listener and reader has grown weary with reiteration. To the operator who is prompted by the most earnest desire to give the utmost possible benefit to his patients, as much useful information is to be found in the rigid analysis of fatal cases, as in those of happy recovery. Now and then the writer has witnessed the melancholy demise of his patient after he had given strong assurance of recovery. He has learned that the surgeon who thrusts his hand into the abdominal cavity and removes a tumor has something to do after his operation is performed, before the wound heals and health is again restored.

FRERE JACQUES, who introduced the lateral operation for stone, used to say to the learned faculty of Paris, when asked about the after-treatment of his patients: "I cut them and God cures them."

The careful study of his fatal cases led to improvements in operating and in after-treatment which have very materially lessened the mortality of lithotomy. The modern surgeon not only cuts but also treats his patients.

Case I.—MRS. W., æt. 56 years, had a tumor originating in the right ovarian region, increasing gradually in size until the abdomen became enormously distended. General health began to break down under the pressure of the tumor. Legs began to swell and pitted on pressure.

Tumor was multilocular and freely movable. A quantity of fluid was in the abdomen outside the tumor. The history and physical signs excluded hepatic disease. Urine yielded neither chemical nor microscopical signs of albuminuria. Heart sounds were normal, although their frequency was increased. Temperature was at times a degree or two above normal. Tumor was removed by abdominal section. Pedicle was ligatured with carbolized silk and turned back into the cavity of the pelvis. Wound closed by interrupted silk sutures. The peritoneal cavity contained a large amount of ascetic fluid, which escaped freely during the section of the abdominal wall. The peritoneum, parietal and visceral, had a peculiar venetian-red color, and rough feeling. No fever accompanied the healing of the abdominal wound. Sutures were removed on the eighth day, the abdomen was then slightly distended with ascitic fluid. The legs had lost their œdema. A few days later the abdomen was more swollen and was painful. The legs were also again œdematous. A trocar was pushed through the abdominal wall and several quarts of reddish albuminous fluid removed. Pulse now rose in frequency, patient began to breathe rapidly, tongue became dry, refused food, became delirious, and died three weeks after the operation of abdominal section. No autopsy. Believe death was due to not draining the peritoneal cavity at time of operating, so that ascitic fluid could come away as fast as found. The diseased peritoneum, might then have healed.

Case II.—MRS. S., aged 60. Was a healthy woman until two years before coming under my care. She had a large multilocular tumor occupying the entire lower two-thirds of abdominal cavity. It was not freely movable, and when moved would pull the uterus about with it. It imparted to the hands a sense of fixation to the posterior abdominal wall. Her complexion was slightly cachectic, appetite poor, strength gradually failing. She felt that she must soon die if the tumor could not be removed.

I made abdominal section, and found the abdomen filled with innumerable cysts, which grew from the peritoneum as it invested the mesentery, uterus, broad ligaments, and in fact every part of that membrane below the stomach and transverse colon.

Extirpation was out of the question. A couple of quarts of ascitic fluid escaped from the abdominal wound, which was then closed carefully, pains having been taken to do the least possible amount of damage to the abdominal contents. The air of the room in which

the operation was performed was heated to 85 degrees. The chloroform narcosis seemed to give the patient very little inconvenience, and she rallied well from the operation. Twelve hours later her temperature rose to 102° F., her pulse became small and rapid, abdomen became tympanitic, and she died 36 hours after the operation, of acute peritonitis.

Case III.—Male, aged 34 years, hard working laborer, of good habits. Had drank very little beer or whisky. Had œdema of legs, scrotum and prepuce, and enormous distention of abdomen with fluid. Had never had jaundice; urine contained no bile or albumen. Heart sounds were regular and normal. Was greatly emaciated and rapidly losing strength. Had been tapped and recovered flesh and strength for a few weeks in consequence. Would vomit and purge occasionally after the administration of drastics and digitalis. I made abdominal section for the purpose of diagnosis. A wound large enough to admit the finger was made in the median line below the umbilicus. Through this, after the ascitic fluid had escaped, the finger was now run over all the abdominal viscera, and a roughened state of the margin of the liver indicating interstitial hepatitis, which could not be felt through the abdominal parietes, was easily made out. Neither history or other physical signs pointed to the real state of affairs. The abdominal wound healed without any untoward symptoms. The patient expressed himself as relieved about as he had experienced after simple paracentesis. Two weeks later he became intensely jaundiced. The urine was coffee colored with bile. I drew away a large quantity of ascitic fluid, but he kept getting worse, and died. Autopsy of abdominal cavity showed the liver and all abdominal viscera deeply tinged with bile Inflammatory bands bound the stomach, transverse colon, gall bladder, and under portion of an enlarged liver into an almost homogeneous mass. This man died so soon after the operation of abdominal section, and the post mortem appearances had all taken place subsequently, that one would suppose death resulted from the operation. Yet, while the inflammatory changes were going on, he felt himself constantly improving, so great was the relief afforded by the removal of ascitic fluid.

(To be continued.)

SOME CASES OF INTEREST.

BY F. G. L. CONNELL, A. M., M. D.*

Case 1 —Was called in October, 1884, to see Mrs. S., farmer's wife, of Richfield, Mich., aged 58 years. Found her in bed, suffering from pain in umbilical region; diarrhœa; pulse 90; temperature 100°. Prescribed capsules, each containing quinine sulphate gr. j., bismuth subnitrate and lactopeptine, each gr. ij., hydrargyrum cum creta, gr. j. Also gave potassic bromide in 20-grain doses to control the pain. Patient improved rapidly. At a subsequent visit she told me she had been habitually constipated for several years, sometimes going for three weeks without defecating; that the fæces passed had the appearance of sheep dung, their passage being attended by severe griping.

She also complained of severe pain in the umbilical region, lasting about three or four hours after each meal. On closely questioning her, she informed me that she had been severely beaten about the chest and abdomen fifteen years ago, which caused profuse hæmatemesis and intestinal inflammation. I prescribed fl. ext. cascara sagrada, ʒ j.; tinct. nux vomica, ʒ iij., tinct. belladonna, ʒ iv.; water, q. s. to make ʒ jv.: one teaspoonful three times a day. After taking of this a few days the patient had a good passage from the bowels every day, and was able to gradually decrease the frequency of the dose. The umbilical pain she complained of usually lasted far into the night. This I successfully controlled by giving her fifteen minims of fl. ext. piscidia erythrina, one hour before bed time. The patient is still under my observation, and has little or no trouble from her alimentary canal.

Case 2.—Was called in consultation in June, 1883, to see Mr. A., aged 34, of Mundy Centre, Genesee County. Found him suffering from dyspnœa, occasional vomiting, anorexia, and considerable pain throughout the whole body. No respiratory murmur on left side of sternum, but a very little in right infra-clavicular region. The heart was pushed far over into the right mammary region. The attending physician thought the patient's spleen was enlarged, and that that was the principal cause of the man's trouble. On percussion I found dullness over the left hypochondriac and lumbar regions, and flatness over the left side of chest. On puncturing the left chest wall with a small trocar, a large quantity of fluid escaped. The patient died about two weeks afterwards; the post mortem revealed an interesting condition; the left lung was atrophied to about the size of a man's fist, and the cavity of the left side of the chest, and about two-thirds of the right side were filled with fluid. The heart, very much hypertrophied, was found in the right mammary region, lying next to the right lung, which was atrophied to one-third its normal size. The liver, spleen, and right kidney were slightly hypertrophied, but the left kidney weighed five pounds and nine ounces. All of the abdominal and thoracic viscera were infiltrated with spindle-shaped cancer cells.

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Case 3.—Mr. B., farmer, æt. 34, of Kent Co., Mich., presented himself at the West End Dispensary in May, 1886, with the palpebral conjunctiva of both eyes very granular, and the inner aspect of each eye covered with a pterygium, the apex reaching nearly to the centre of the cornea. The trachoma was treated daily for three weeks, being lightly rubbed with a piece of alum, followed by an application of oleum ricini. Under this treatment the granulations disappeared. Each pterygium was then severed by placing the blade of a slender kinife beneath it, cutting the growth near the junction of the cornea and sclera. The portion lying over the sclera was then detached from the eyeball by means of a small pair of forceps, and cut across at the base close to the sound membrane. The part over the cornea was left to itself, gradually being absorbed, and the denuded position of the sclera treated thrice daily with a solution of alum, followed by an application of oleum ricini.

The position of surgeon in the navy, according to the Globe-Democrat, is not an enviable one. The examination that applicants are required to undergo is very rigid, and as a rule physicians who are capable of passing the ordeal can find fields for their usefulness more congenial to their tastes and very profitable to them by engaging in private practice. When a physician obtains a physician in the navy he is assigned to the steerage, without rank, and is given an ordinary salary. In the army it is the reverse. When a physician joins that branch of the service he is commissioned a second lieutenant and is paid accordingly, and commands all the respect the position is entitled to. The result is that there are no vacancies in the army, while there are over 200 candidates for positions. In the navy there are fifteen vacancies with no applications to fill them.

Observations on the pupils of the Paris public schools are reported to corroborate the statement that mental overwork has a deleterious effect on dental growth, the teeth of hard-worked pupils being markedly more prone to decay than those of pupils not heavily tasked. Should these observations be confirmed they will furnish an answer to the perplexing question of the cause of the bad teeth of the modern man, as compared with those of his ancestors. If this dental deterioration keeps pace with increasing intelligence, the time may not be far distant in which a man's intelligence may be adjudged by the condition of his molars.

For the albuminuria of pregnancy Dr. Parvin, of Philadelphia, regards an absolute milk diet as the best of all therapeutic methods.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

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Editorial.

PROGRESS VERSUS FALSE CONSERVATISM IN MATERIA MEDICA.

A celebrated physician, whose extensive experience enabled him to speak with authority, in response to a query as to the utility of drugs said, "when I see a physician skeptical as to the value of drugs in relieving disease, I conclude that he has not used them intelligently, since no one who had thus used them could be in doubt as to their efficacy."

It is this intelligent use of drugs, and a proper appreciation of their application and limitation that is so much needed at the present time to establish therapeutics on a thoroughly scientific basis.

But how shall this exact knowledge of the remedial action of the almost innumerable agents of the materia medica be acquired?

Certainly not by supinely lamenting the inadequacy of remedies to effectually cure all manifestations of disease.

Not by covering our ignorance of the nature and action of drugs by foolish skepticism as to their utility. We should rather, by a careful and painstaking study of the physiological action and clinical effects of each drug in the materia medica, seek to eliminate those which are worthless, (doubtless many are), and learn to value the many whose claims are justified by the recorded experience of competent observers.

Nor should our efforts stop here, for though it may be utopian to presume that for every human ill nature has an adequate remedy, it is far more absurd to suppose that the medicinal flora of the world have all been discovered, or an exhaustive knowledge of their action and application acquired.

Were proof needed of the fallacy of such a supposition, the testimony afforded to the most superficial observer by the history of the additions made to the materia medica during the past decade would be overwhelming.

During this period the materia medica has been revolutionized. The researches of physiologists, and the enterprise and competition of

pharmacists have awakened a spirit of investigation, the beneficial results of which to medicine cannot be over-estimated.

It is objected by conservative therapeutists that as a result of this activity in research medical literature is flooded with claimants for therapeutic honors clamoring for recognition, many of which are unworthy of a permanent place in the materia medica. Doubtless this is true, but it is an evil inseparable from the rapid progress being made.

Who will condemn research that has added to the materia medica such agents as coca erythroxylon, and cocaine, cascara sagrada, viburnum prunifolium, gelsemium, manaca, yerba santa, grindelia robusta, Jamaica dogwood, euphorbia pilulifera, jaborandi, pilocarpine, eucalyptol, antipyrine and pichi—a spirit of research, which, communicated to pharmacists, has led to vast improvements in the elegance and palatability of pharmaceutical preparations, and thus benefited medicine by extending the range of its application and providing for its convenient administration.

Already the pharmacopœias and dispensatories have been compelled to recognize the established claims of many of the newer drugs. It is false conservatism, a conservatism fatal to progress, which would seek to discourage their discovery and introduction. Those most open in their opposition to enriching the materia medica will be most often found to be wedded to the therapeutics of fifty years ago, and most ignorant of the application of new drugs.

If medicine is not to stand still or retrograde the discovery and introduction of remedies now unknown to science should be encouraged. If we are to have a wider knowledge of facts let pharmacy and medicine work hand in hand. Let the pharmacists bring to bear all the power of capital and experience to place in the physician's hands the best preparations of all the drugs that the medicinal flora of the world can afford, (looking for pecuniary returns to the sales created by the approval of physicians), and let physiologists and physicians test them by their most rigid tests that the truth may be arrived at, that useless drugs may be weeded out of the materia medica, and the armamentarium of the physician enriched and strengthened by all the remedies of real utility, for it is only by the widest and most open and thorough investigation, that we may hope to make medicine a science in fact as well as in name.

A TIMELY WARNING.

At a sanitary convention lately held at Philadelphia, Dr. Frank Woodbury read a paper entitled "Physic Tippling" in which he treated of the rapid increase in the consumption of such drugs as the bromides, chloral and opium. "It was estimated, he said, that of chloral one ton a day is consumed in England and America. A large proportion of the death rate among children was attributed to the abuse by the parents of medicines acting on the nerves. The injurious effects of patent medicines were considered, and in conclusion he recommended: "1. The examination of all proprietary medicines by a Government or State Commission of experts, who shall have the power to permit the sale of such as are harmless or especially likely to prove serviceable, and to prohibit the sale of all which are peculiarly liable to do injury, and those which are found to be worthless and frauds upon the public. Such a commission was appointed by the Japanese Government several years ago, and has been found to be of great service in that country. 2. The instruction of the public to properly estimate drugs, and to regard every unknown medical agent as dangerous and endowed with capacity for harm. Let them escape the caustic criticism of Moliere upon those who pour medicine about which they know little into bodies about which they know less, in order to cure disease about which they know nothing at all."

Dr. Woodbury's recommendations should receive the endorsement and warm support of the medical profession who are best able to appreciate the abuse of proprietary medicines by the laity.

A case in point is communicated to a recent number of the *British Medical Journal* by Dr. John Scott, of Manchester:

"The foolish mother of a five weeks' old infant, which was suffering from diarrhœa, purchased some stuff called "infants' preservative," and gave the child a teaspoonful. The diarrhœa promptly ceased; so did consciousness. After five hours of ineffectual treatment, the child was brought to me in a state of deep coma. Faradism failed to arouse consciousness, or to improve the flagging respiration. By means of a Teale's worm catheter stuck on the end of a Higginson's syringe, warm water was injected into the stomach; and, as vomiting was not induced, reflex irritability being completely in abeyance, the catheter was jerked off the syringe, and by siphon action the stomach made to empty itself of a strong-smelling, brownish fluid. The proceedings were repeated several times, until the stomach was washed clean. In about two hours, the child was fit to be sent home.

"In Quain's Dictionary, I find it stated that 'there is no doubt that great numbers of infants perish every year through the improper use of quack remedies containing opium."

Dr. Scott suggests as an effectual remedy for this abuse that an analysis of any secret medicine be printed on the outside of the package containing it.

The suggestions of Drs. Woodbury and

Scott if acted upon would have a most salutary effect.

The examination of proprietary medicines by honest competent experts would benefit the manufacturers of such preparations as were suitable for administration, and only affect unfavorably the interests of nostrum vendors whose wares have no medicinal value and who rely for their sale on human gullibility.

If it be impracticable to appoint a Government or State Commission of experts, physicians can at least aid in "instructing the public to properly estimate drugs and to regard every unknown medicinal agent as dangerous and endowed with a capacity for harm."

THE POST-MORTEM EVIDENCES OF THE INSANITY OF THE LATE KING LOUIS, OF BAVARIA.

The remarkable career and tragic end of King Louis, of Bavaria, and the ante-mortem differences of opinion as to his sanity among medical experts, make the result of the necropsy of especial interest to physicians.

There seems to have been obvious reasons, besides the mentally perturbing influences incident to royalty, to account for this unfortunate monarch's divergences from the rational.

The following were the conditions found at the post-mortem examination: The body was about six feet three inches in length, and the circumference of the chest was forty inches. There were extensive changes of a degenerative nature in the skull, as well as in the brain and its membranes, consisting partly of abnormal development, partly of chronic inflammations of old and recent date. The scalp was thick and very vascular. The skull was small in comparison to the size of the body, and somewhat asymmetrical, the diagonal diameter from the left of the forehead to the right of the occiput being 17.2 centimetres, and from right of the forehead to the left of the occiput 17.9 centimetres. The roof of the skull was extraordinarily thin, its greatest thickness being three millimetres (0.12 inch). The coronal and sagittal sutures were completely obliterated on the inside of the skull. On the inner surface of the frontal bone, on both sides, were a number of large and small bony growths. The superior longitudinal sinus was excessively wide behind, and remarkably narrow in front, near the ethmoid bone. Groups of pacchionian granulations projected into the interior of the sinus. The dura mater was generally much thickened; in the frontal region especially it was vascular, and extremely shaggy; a bony growth, two millimetres in height, was found here. The left petrous bone showed a projection a centimetre in diameter at the base, corresponding to a depression in the temporal lobe of the cerebrum. The sella turcica was asymmetrical thickened, porus and fragile in a great part of its extent, as was also the anterior fossa of the base of the skull. All the sinuses in the base of skull were filled with dark fluid blood. The brain (without the dura mater) weighed 1349 grammes (47½ ounces). The arachnoid, over a great part of both hemispheres, was thickened, and had a turbid white appearance. Over the median end of the left anterior central convolution, and the beginning of the first frontal convolution, the arachnoid and pia mater were adherent over a space of the size of a shilling, and formed a thick hard mass, by the pressure of which the corresponding part of the skull was reduced to the thinness of paper. On the surface of the skull, pretty equally on both sides, portions of the convolutions appeared shrivelled, especially the commencing parts of the three frontal convolutions, the middle end of the anterior central convolution, and the parts surrounding the middle division of the postcentral furrow. The substance of the brain was vascular, and rather soft. The heart and lungs were healthy. There was chronic catarrh of the stomach. The liver was congested; the spleen was enlarged; and the kidneys were large, but normal."

SOCIAL QUESTIONS.

Whatever may be the differences of opinion among medical men as to the utility or moral effect of the attempt to regulate the social evil by legalized restrictive or supervisory measures, there has been so much cant and rant written on this vitally important subject that the following frank letter published by "A Woman" in the Med. and Surg. Reporter of June 19, 1886, is, to say the least, from its candor, refreshing:

"The Woman's Journal, of June 12, contains a letter from Lillie Devereux Blake, in which that writer states that the women of New York have reason to be proud of their legislative success of this year, inasmuch as the "contagious disease" act is defeated.

As this source of congratulation is not shared by all women, it has occurred to me, after reading the editorial in your issue of June 5, to offer you for publication some views of a different character.

Women in general prefer to ignore the element in sociology known as the "social evil." That the efforts of all societies for the suppression of such crimes are unsuccessful is not claimed; but it would be well to remind such interested bodies of what Goethe has said, that "Morality is not an end in life, but is merely a means to arrive at a higher culture." It is to the higher cultivation of the nation that we must direct our efforts, and the rest

will take care of itself. Educate a man or a woman to know him or herself thoroughly, and the individual will make use of all things of life only for his higher advancement. Those things which would degrade the character will be cast aside, and those which are indifferent will take their true place.

There is no use shutting our eyes to the world around us; by doing so, we only postpone the hour for settlement. Licensing and registering *maisons de tolerance* will not increase the number of *habitues*, any more than foundling homes have increased the number of illegitimate births.

It would seem as if any measure to suppress specific diseases should be advocated especially by women, and given their support.

How much might not the influence of medical women avail to open another path of life to women of such houses; though we should not deceive ourselves as to the fact that many women actually seem to prefer this career to that of domestics or trades. A most important reason to advance for women physicians having charge of medical inspections, is that such supervision would be essentially medical, and uninfluenced from other motives.

The question of limiting child-bearing, referred to in your editorial, is also one that should be considered and accepted as a right of each woman to control. Those methods which are effective and not injurious should be imparted by women physicians to their patients, although the publication of such methods should be discountenanced as indiscreet.

Viewing these questions in their broadest light, a full discussion can only result in benefit. They should be brought to the sunlight, and superstition, and prejudice, and ignorance dismissed."

MEDICINE AS A BUSINESS.

The original and the highest conception of the physician's function is to relieve suffering and to restore the normal equipoise between the forces, the disturbance of which constitutes disease. Occasionally one runs across a young enthusiast who practices medicine with scarcely any other purpose, but his race is becoming well nigh extinct. This original and high conception of the physician's functions, like that which originally obtained in the case of the clergyman and the lawyer, made it well nigh a sacrilege to think of money in connection with it, and the idea of pursuing the healing art even as a livelihood, to say nothing of following it as a means to the acquisition of superfluous wealth, was never permitted. But times change, and we change with them, and the learned professions, which were originally thus purely altruistic, have very largely subordinated altruism to egoism. With exceedingly rare exceptions men now devote themselves to medicine, law and theology, primarily for the money there is in the respective callings. This statement will go undisputed, with the possible exception of its application to the case of clergymen. There is an impression that these gentlemen are purely unselfish in their work; this is, however, a fiction, for when one of our brethren of the cloth refuses a call to a higher salary, or leaves a higher for a lower, the fact is traceable to circumstances quite other than such as would justify the assumption of pure self-abnegation. This is the rule, and when exceptions occur. they but substantiate it.

Far be it from us to insinuate, even for a moment, that the members of either of the three professions mentioned pursue their calling with an eye single to self, or that its pursuit as a livelihood is incompatible with a true regard for the welfare of those who commit themselves to their charge. The process of evolution in its operation on these callings has, however, developed them into money-making vocations, and as such they have come under the rules governing the latter. While, therefore, it is none the less than formerly a physician's duty to promptly restore his patient to health, it becomes him, as it becomes the merchant and the mechanic, to make his patron a source of legitimate revenue wherewith to provide for immediate wants, and against the exigencies of the future.

LEAD-POISONING BY COOKING UTENSILS.

The prevalence of lead-poisoning is much more extensive than is usually recognized. A few years ago we called attention to this subject in a paper read before the Michigan State Medical Society, in which we maintained that much of what passes for rheumatism is really lead poisoning, and illustrated the proposition with several reports of cases. Since then we have received a number of letters from physicians in various parts of the country, in which our views are strongly corroborated. The vague muscular pains, and even the more acute articular pains, which, after resisting the prolonged use of remedies usually effective in rheumatism, subside promptly after the retirement of the patient to one of the sulphur springs which abound, are, unquestionably, due to the presence of lead in the system. When the extent of the adulteration of the tin with which cooking utensils are coated, is taken into consideration, the prevalence of lead-poisoning is not surprising. Our boards of health would find in this direction a field of inquiry which would yield valuable results to the general public. The matter has engaged the attention of the German authorities, and they have now under consideration a bill intended to regulate it. It provides for the pro-

hibition of the use of any material in cooking utensils containing more than ten per cent. of lead, and this limit is permitted only in the case of solder. Not over one per cent. of lead is allowed in the tinning with which iron vessels are coated. The bill, if passed, will absolutely prevent the legal employment of pewter and soft solder as now constituted, as these materials contain from one-half to three-fourths of their weight of lead. This bill is respectfully submitted to the consideration of our authorities, who have lately shown such zeal in the suppression of oleomargarine as an admixture of butter.

THE MIND-CURE IN FICTION.

There is something so fascinating to the popular mind in the so-called doctrine of the "mind-cure," that it is not strange that it has been made to do service in the line of the lighter literature. In her new book, "Her Desperate Victory," Mrs. M. L. Rayne, of this city, deftly introduces it in this manner:

"Quietly the sick girl closed her eyes and drifted away—away to the calm seas of rest and infinite peace to which the spirit disembodied by sleep, dreamlessly goes. BEATRICE sat near her with bent head and closed eyes. Hour after hour glided away and still the sick girl slept, and still BEATRICE sat there motionless, rigid, giving out the precious mind-healing, which is the special gift of the Christian scientist. Day dawned and the sun rose; noon came and passed; to all inquiries a backward motion from BEATRICE and a finger pressed to the lip made answer. Alas! What harm has been done by over-officiousness. It has been well said that ignorance can tear down in a day what knowledge has been a thousand years in building. It was Mammy who in the stupidity of her faithful nature broke the spell at last by forcing her way in with a tray of refreshments, sure that her "deah MISS MARSH was done starved," MARCIE opened her eyes and sprung up in bed feeling new life in every limb and prescient with health and vigor, but the tired and prostrated healer, out of whom so much magnetism had escaped, lay back in her chair, white, insensible and to all appearance dead."

THE MICROBE OF RABIES.

In a recent number of the *London Lancet* DR. G. F. DOWDESWELL announces his discovery of the microbe of rabies, preparations of which we learn from the *Medical Record* were shown at the meeting of the Royal Microscopical Society on the 9th ult.

Evidently the millenium of the Bacteriologists is approaching. Soon we shall expect to see the specific cause of every communicable disease proved to be a micrococcus and the practice of medicine simplified to the study of the habits, environment, and conditions of existence and development of these organisms and the best methods of effecting their extermination.

Since it has been shown by CANTANI (see MED. AGE Oct. 26, 1885, p. 476) that microbes can be employed in therapeutics, one variety of the numerous family destroying others when brought in contact with them, it will perhaps only remain for the physician to keep a standing army of the proper kind of microbes and mass them at that point in the organism to which the enemy has laid siege.

Notes.

DR. O. W. HOLMES: Nothing is clearer than that the Merciful Creator intends to blind most people as they pass down into the dark valley. Without very good reasons, temporal or spiritual, we should not interfere with His kind arrangements. It is the height of cruelty and the extreme of impertinence to tell your patient that he must die, except you are sure he wishes to know it, or that there is some particular cause for his knowing it.

DR. DOANE: A gentleman in Sea Bright, N.J., has a son formed in part like a cow. The head is human, but hoofs are substituted for hands and feet. The child walks on all fours and bellows like a bull. BARNUM saw the child and made an offer for it, which was refused. I can substantiate this statement by the oaths of responsible parties who have seen it.

DR. LUIGI G. DOANE has had great success with the iodide of sodium. He reports his patients as saying that it has a more agreeable taste, and finds that many cases take it who vomit the iodide of potassium. It is indicated in the same diseases as the iodide of potassium. The dose is x to xxx grains in solution.

Book Notices.

MEDICAL AND SURGICAL DIRECTORY OF THE UNITED STATES, comprising a list of all the physicians in the United States, arranged alphabetically. Complete in one volume.
R. L. Polk & Co., Detroit, Mich., publishers. 1886. Price, $7.00.

The character and scope of this work are well indicated by its title.

Its 1,455 pages contain the names of nearly 80,000 persons practicing medicine within the

United States and Territories. These are arranged alphabetically by state, city, and post office, and in large cities the street and number are given. Each name is accompanied by information regarding place and time of graduation.

A descriptive article precedes the list of each State and Territory, embodying such matters as location, boundaries, extent in miles and acres, latitude and longitude, statistics regarding climate, temperature, population, rate of mortality, names and locations of the best known mineral springs, all medical and charitable institutions, medical societies, and the full text of all State laws relating to the profession. In addition to this complete directory the 80,000 names are repeated without addresses, arranged alphabetically, accompanied only by figures, whereby the reader can readily find each name in its appropriate place in the directory proper.

This list, the publishers suggest in their introduction to the work, will enable any one to find the present location and address of any physician in the United States whose name he knows. It will, doubtless, bring many old friends into communication who have lost trace of one another since graduation, and possibly in some cases discover the whereabouts of others who would prefer to remain concealed.

Preceding the directory of names are departments, giving full lists of all medical colleges, either existing or extinct, in the United States and Canada, of officers of the medical departments of the United States, army, navy, marine hospital service, and pension department, and a complete directory of the medical journals of United States.

The comprehensiveness and convenience of this work may be gleaned from the above description. The publishers have taken the greatest care to secure accuracy, and seem to have exhausted all possible sources of information in compiling the mass of facts presented, and to have arranged them in the most condensed and convenient form for reference.

To physicians and pharmacists, medical colleges, boards of health, medical students, and to all interested in having the latest and most reliable information about the medical profession of the United States, this work will be indispensable.

We notice that most of the prominent drug houses of the country are represented in the advertising pages of the work, a feature not without interest to the intending medical purchaser.

Considering the extent and character of this volume, and the general excellence and good taste of the typographical work and the binding, the price asked for it is very reasonable, and we believe it will command a wide sale.

Formulary.

INFANTILE DIARRHŒA.

In DUJARDIN-BEAUMETZ'S Diseases of the Stomach and Intestines, an English translation of which, by DR. E. P. HURD, has just been issued, the following suggestions of PARROT as to the treament of infantile diarrhœa, entero-colitis, and cholera infantum, are highly commended:

℞ Subnitrate of bismuth, 2 parts.
Syrup of blackberry, 100 parts.
M.

Dose: A teaspoonful every third hour before nursing or taking food.

If the stools are of a green color, and have the cut spinach appearance characteristic of entero-colitis, the following formula is preferred to the above, viz.:

℞ Subnitrate of bismuth, 3 parts.
Lime water.
Syrup of blackberry, ää 50 parts.
M.

Sig. Dose, a teaspoonful every third hour before nursing or taking food.

In acute athrepsia and threatened collapse, PARROT administers, alternately, every ten minutes, a teaspoonful of the following mixtures, both of which are to be iced before administered:

1. Old brandy, 1 part.
Water, 20 parts.

2. A nutrient broth made of lean beef.

Twice or thrice a day the infant should be immersed for five minutes at a time in a warm bath, at about the blood heat. Into this water a little bag of mustard flour may be allowed to soak. Two ounces of mustard are sufficient for six gallons of water.

Medical Progress.

TO USE OR NOT TO USE JEQUIRITY.—So much has been written about jequirity, its beneficent and benignant action, that the following clear statement from the Weekly Med. Review of its value in pannus when intelligently applied will be of interest:

DR. DUJARDIN, in recommending the use of powdered jequirity in the treatment of trachoma, states the following:

The question of the use of jequirity, now almost three years old, is not yet solved. He would be sorely puzzled who, without any experience of his own, should try to form an opinion concerning the value of this drug from so many contradictory statements which

he may find at every step in the abundant literature of this subject.

For the one jequirity is a most dangerous remedy, the use of which ought not only to be abrogated, but even prohibited on account of the disasters which follow its therapeutic application. VOSSIUS, of Koenigsberg, absolutely condemns jequirity after a series of grave results. * * *

* * * It would be best to quickly forget jequirity, if all experiments with it had led to as unhappy results as have those of the German surgeon. This not being the case, we will go to the partisans of jequirity, and here we find enthusiasts, especially COPPER (of Brussels). * * *

* * * We have ourselves very largely experimented with jequirity since the first few days after its introduction into the therapeutics of ocular affections We had excellent opportunities in our department of the North, which is so full of people suffering from trachoma. In the Journal des Sciences Médicales of Lille (June, 1883) we have related our first experiences which were undoubtedly happy ones, yet we did not allow ourselves to be carried to the unbounded enthusiasm of DE WECKER, who saw as certain a specific in jequirity against granular ophthalmia as in quinine against malarial infection.

We had found that the jequirity ophthalmia had an especial and powerful action in clearing up the pannus. Its effects on the granules in the conjunctiva, in a great many cases, appeared to us as almost *nil*.

* * * We said, therefore, in a general way that we were tempted to believe that jequirity acted well upon the granular keratitis and very little upon the granular conjunctivitis, especially where there was a certain degree of hypertrophy of the granulations(!) * * *

After a three years' experience we are not only not forced to renounce the conclusions drawn in our first paper, but, on the contrary, we must uphold them perfectly. Especially in the cases of old trachoma, when the granulations of the conjunctiva have begun to become atrophic, and where there is a discouraging corneal trouble, it is well to have recourse to jequirity as a heroic remedy. * * *

* * * But it is not necessary to reserve jequirity for these cases only. When there are combined with the pannus of the cornea, projecting granules in the conjunctiva, the jequirity may also be applied with great advantage. It will give back to the cornea a part of its transparency, but it will leave the granules about in the same state as they were before. The common caustics, the sulphate of copper, the nitrate of silver, the hydrochlorate of mercury, will finish the work so happily begun with the aid of jequirity, and by this mixed treatment, the healing, otherwise so prolonged, will be materially shortened. This result is also a valuable one.

After having used at first the weak macerations of jequirity, recommended by DE WECKER, we have dared to use more concentrated preparations, five or six per cent., without, however, reaching ten per cent., as COPPER advised. * * *

* * * A serious objection to macerations of the jequirity is their rapid disintegration in spite of all precautions, as the addition of boracic acid, salicylic acid, creasote, etc. * * *

* * * We have never seen any accident due to the use of this remedy, although we have treated more than one hundred cases with strong macerations of jequirity, of six and even seven per cent. The success remained often behind our hopes, but never have the eyes which were treated with jequirity suffered any damage from this agent.

It was, therefore, not this consideration which prompted us to use the jequirity powder, but the annoyance caused by having to prepare a fresh maceration for almost every patient, in order to get a good effect.

Instead of applying the powder directly to the conjunctiva, we prefer to dust it onto the inner surface of the lids with a camel's hair brush. The eye is then allowed to rest for a few minutes. The mechanical action of the powder causes some redness and lachrymation, but no pain worth mentioning. We usually apply it a second time, and even a third time, when we think it necessary to cause a violent inflammation. Before sending the patient to his home, we take the precaution to wipe all powder collected in the lower conjunctival fornix, away with the finger, as a jequiritic eschar in this location might cause the formation of a symblepharon and even of a certain degree of entropium of the lower lid.

About thirty patients have been thus treated, and all except the first few, have not kept in the infirmary, but have been sent home with a simple treatment with sulphate of copper or nitrate of silver. The lack of sufficient space forced us to act in this way. Their stay in the hospital would, of course, be preferable. * * *

* * * We have to state here, that the jequirity powder, dusted twice or three times into the eyes, as described above, within a quarter of an hour, develops a jequiritic inflammation, which is at least equal in intensity and in duration to the one resulting from the use of a five-per-cent. maceration. In this we differ from A. ALT'S opinion, and this difference is undoubtly due to the fact, that we use the powder much more freely than he does, since he makes only one application and that even limited to one or the other lid. With these reservations we agree with the American surgeon in proclaiming the superiority of this new method of the application of jequirity. It seems to us that the powder is called upon to take the place of the macerations which have, until now, almost exclusively been used by those who had confidence in jequiritism.

THE ANALGESIC AND HYPNOTIC EFFECTS OF JAMAICA DOGWOOD.—My son, J. A. MAYES, JR., one of your recent graduates in pharmacy, informs me that, in your lectures, you state that you have had no experience with the Jamaica dogwood, *Piscidia erythrina*, as an anodyne.

As I have used it very freely, and with satisfactory results, I feel like imparting to you my conclusions, and thereby inducing you to make some trial of it. I will state in one sentence my verdict—*it has nearly all the good properties of opium, and none of the bad.*

Its good effects are shown by relieving pain promptly, and by its soothing influence upon the nervous system, inducing sleep in almost every case, and being never followed by nausea

or by the gastric disturbances that follow the use of opiates. I will give sketches of a few cases in illustration of my mode of using it:

1. I was called in consultation to see a woman in labor. She had been having strong pains for two days and nights, but no progress was made; the head of the child could not be reached by the forceps, so the physician in attendance told me. On examination I found it so, and also discovered that the pains were *not* bearing-down pains; I made it out to be a case of false labor, and so informed the physician. I advised one teaspoonful of fl. ext. Jam. dogwood at once, and to be repeated in half the quantity every two hours, if needed. The first dose stopped all pain; she went to sleep, and slept several hours, then got up and attended to her household duties, having no new pains for a week, when she went into true labor, and was promptly delivered.

2. Yesterday afternoon I was called to a case of threatened miscarriage, the patient being four and a half months pregnant. There was no hæmorrhage, but very strong and frequent bearing-down pains. I prescribed a half teaspoonful of fl. ext. Jamaica dogwood every hour till she was relieved. The patient took two doses (one dram in all), when the pain disappeared, after which she went to sleep, and, as she told me this morning, had slept soundly all night, waking to feel quite well.

These two cases will point out the value of the drug in an important class of affections. I have used it during protracted labor in many cases as a means of giving the patient a more perfect rest during the intervals between pains, thereby sustaining the strength, and I have never found it to have any bad effect in any way. It will not arrest the true labor pains.

In general practice I prescribe the Jamaica dogwood very largely as a substitute for opiates, and am very seldom disappointed in obtaining excellent results. Now and then I find cases in which it does not produce sleep; but, as the pains are relieved, it appears that the hypnotic effect is not as certain as the anodyne effect.

Please try the following prescription for delirium tremens, or *mania a potu*. It has worked wonders in my hands:

℞ Fl. ext. erythroxylon coca, six drs.
Fl. ext. celery, four drs.
Fl. ext. Jamaica dogwood, four drs.
Hoffman's anodyne, q. s., to fill two-ounce bottle.

Dose, two teaspoonfuls every two hours till sleep is induced, then one tea-spoonful every three, four, or five hours, till the nervous system returns to a normal condition.

I think you will be pleased with this prescription. Fortunately, I don't see enough of delirium tremens to establish the usefulness of the prescription in all cases, but so far as used I have never seen better, or even as good, results from any other remedy. The combination is worth studying, and a full analysis of it would be an instructive exercise.—DR. J. A. MAYS, in *Am. Pract. and News.*

THE PREVENTION AND TREATMENT OF MAMMARY INFLAMMATION. — The following editorial remarks of the Medical Bulletin are trite, but not lacking in practical interest. It is encouraging to learn that there is no disease more amenable to treatment than mammary inflammation. The author does not seem to have appreciated the value of bandaging in mastitis, since he makes no mention of it:

"There is no more painful or trying ordeal in a physician's experience than when he is called to a case of mammary inflammation which threatens to terminate in suppuration. The pain of the disease is atrocious, but the mental pain, the dread, the anxiety of the patient is still more agonizing, and is sometimes so intense as to induce an attack of puerperal mania.

There is no disease, however, that is more amenable to treatment, provided it be instituted early and conducted by a skillful and energetic hand. Mammary inflammation, as usually seen, is due to engorgment of the glands from retention of milk. This retention may be due to neglect of putting the child to the breast early, or to inability of the child to empty the breast either from weakness or congenital deformity, or from the imperfect development of the nipples of the mother. It is due most frequently, however, to the death of the child.

The treatment varies with the cause. If the child is living and able to nurse, a prompt saline cathartic should be administered to the mother, in order to produce free watery evacuations, and lessen the formation of milk for the time being. At the same time the breasts should be gently rubbed from the periphery towards the centre with any bland oil, in order to relieve the congestion of the lacteal ducts by promoting the outflow of milk. As soon as the breasts become somewhat soft under this manipulation, and some milk can be expressed from the nipples the child should be applied to the breast at intervals, or the breast pump used occasionally, until full relief is obtained.

If the child, however, be dead, or unable from palatine deformity or any other cause to nurse, an endeavor should be made to prevent the formation of milk to any amount, by covering the breasts with belladonna ointment, and securing free catharsis for two or three days by the administration of various salines. This treatment will be found effective in the great majority of cases. The production of milk is largely influenced by the demand. If there be no demand on the part of the infant, or otherwise, and if the natural tendency to vascular fullness of the gland be counteracted by the production of free catharsis, the secretion of milk will be small.

If this treatment fail, however, or if the patient is not seen until the glands are hot, hard, and swollen, the temperature high, the pulse bounding and the pain excessive, the best external application is a bladder of ice, or a cloth dipped in ice-water, as recommended by DR. HIRAM CORSON, of Norriston, Pa. For internal administration there are two remedies which are especially valuble, veratrum viride and phytolacca. They may be given separately, but are almost specific when given in combination. The following formula, if given before suppuration has ensued, will invariably relieve pain, and induce resolution in a short time:

℞ Tinct. veratri viridi, ʒ j.
Ext. phytolaccæ, f ʒ v.
Aquæ, ʒ vj.
M. Sig. One teaspoonful in water every two hours."

Free purgation should also be produced by the administration of five grains of calomel, followed in two or three hours by a saline cathartic. When suppuration has occurred a free incision should be made at once, and the pus evacuated.

KOLA.—The attention which has been drawn by DR. GIHON, in an article recently published, to the merits of kola, and the interest taken by the profession in new remedies which may possibly prove to be of signal value, induce me to report the following case, in which the results have been so striking as to encourage further and more definite trials of this remarkable agent.

The patient, a lady of 36, had suffered during childhood from rheumatism. Up to a recent period, however, she had been in good health, and able to lead a busy, active life. Eighteen months since, she was attacked with severe endocarditis, from which she recovered slowly, and with a damage to the mitral valves (insufficiency). The action of the heart was feeble and irregular, and there was a good deal of dyspnœa, faintness, and fatigue upon even slight exertion. She had always been subject to occasional headaches, and these now became periodic and severe, occurring at first at intervals of four or five weeks, and lasting two days. Latterly they had increased in frequency and intensity, coming on about twice a month, each attack causing three days of suffering so severe as to fill the patient's mind with constant dread of recurrence. The discovery of a ratio of urea much below that of normal urine, with the existence of an occasional granular cast, established the conviction that the headaches were uræmic in character.

About three months since, she commenced the use of the kola-paste, taking about ten grammes once or twice daily, in hot milk, prepared in the same way as chocolate. During the first nine weeks of its use there was no recurrence of headache. Then there was a comparatively mild attack, which may fairly be attributed to a suspension of the use of the kola in consequence of the marked improvement. The general condition has materially improved, the heart's action is much more regular, and the attacks of dyspnœa and faintness have nearly disappeared. The most characteristic effect seems to have been an immediate relief of the sense of fatigue, a sense of *bien-être* and cheerfulness to which the patient had been long a stranger. The employment of the kola seemed to be satisfying to the appetite, for, whenever taken, it appeared to serve as a substitute for the next following meal. But the nutritive processes were not impaired: on the contrary, the bodily weight increased from 98 to 105 pounds. No marked change in the character of the urine has been observed. The quantity voided has somewhat increased, but the total amount of urea excreted remains at about ten or twelves grammes daily.

As far as the experience in this single case goes, it would appear that kola may be a valuable therapeutic agent. The considerable percentage of caffeine which it is said to contain would theoretically make it useful as a heart-tonic. But caffeine had been tried in this case without any marked results, and the same experience had been had with convallaria. Digitalis had been the only agent which was found to be of any service, but its effects were only temporary and palliative, not being sustained even when given for long periods combined with iron. The improvement which was established with the employment of the kola was marked and immediate, and the gain in the well-being and comfort of the patient has been most gratifying.—DR. HUDSON, *Philadelphia Med. Times.*

THE DIURETIC INFLUENCE OF COCAINE.—DR. J. M. DACOSTA, in the Philadelphia Medical News, June 19, 1885, presents an interesting table showing the diuretic action of cocaine in eight cases He thus comments on the results of his observations:

"An interesting question arising in connection with this, as well as with the other cases of albuminuria, is, whether the amount of albumen is diminished by the administration of cocaine; and whether we are likely to find in cocaine, irrespective of its diuretic influence, a remedy of value in Bright's disease. It does not so seem; for, in the cases under observation, the amount of urea passed was apparently unchanged by the cocaine. Indeed, it appeared as if the whole amount passed in 24 hours with the increased secretion of urine was generally larger. Certainly in the chronic cases of the disease, therefore, we have rather a contraindication for the employ of cocaine, except for temporary purposes.

Another interesting question is, what elements of the urine are excreted in larger amounts under the diuretic influence of cocaine. Is it simply the water which is increased? We think not; since, notwithstanding the larger flow, the specific gravity is but slightly altered. Thus, in Case V., in spite of the extraordinary augmented secretion, the specific gravity remained much the same: it varied from 1.020 to 2.025 during the observations, the precaution having been taken to remove the albumen by boiling and filtering. We believe that the solids are excreted in larger amounts; we have found copious deposits of urates. Whether the other ingredients of the urine, and especially the urea, are excreted in more considerable quantities we have not yet determined.

Cocaine, as can be easily observed by sphygmographic tracings, undoubtedly raises arterial tension. Is not this largely the explanation of its diuretic action? Perhaps too great a tension may afford the explanation of its occasional failure as a diuretic; or rather of its having even the reverse effect.

Thus, Case VIII., taking one grain three times daily by the mouth, suffered from headache and violent attacks of intestinal colic; the face was flushed, the pulse full and strong. The quantity of urine was much diminished; the specific gravity was raised from 1.020 to 1.025, and there was very large deposits of urates.

Is the diuretic action of cocaine persistent, or does it stop immediately after the withdrawal of the remedy? We found that it did not; that, indeed, the urinary flow was apt to remain freer for some time, and then appeared for a certain period of time to be more easily influenced by other diuretics than before. How far we can make use of cocaine for augmenting the excretion of special solid ingredients of the urine, must remain undetermined until this part of the inquiry has been more fully worked out.

The therapeutical application of these observations is self-evident. Irrespective of its diuretic influence, we ought to obtain advantage from cocaine in instances of weak heart with dropsy; and, so far as we have been able to persue this line of investigation, such is actually the case. In uræmia, with scanty secretion of urine, the remedy is also well worth a trial.

THE TREATMENT OF CHOLERA INFANTUM.—In an editorial on Cholera Infantum appearing in the New York Medical and Surgical Journal of June, 1886, the following suggestions regarding the treatment of this malady are made:

Equalize the circulation, which, of itself, will equalize temperature. The nearer these functions approximate a healthy condition, the less will be the irritability of the stomach, and the liability of vomiting as well as the tendency to relaxation of the bowels.

A slight diarrhœal attack characterizes the beginning of this disease, and may be arrested by the use of small doses of the Compound Syrup of Rhei et Potassæ, combined with small quantities of the tincture of hydrastis canadensis, tincture of wild cherry, and the tincture of prickly ash. A spice poultice over the region of the stomach and thick bandages of flannel to be applied tightly around the abdomen. If there is much heat about the head, the feet should be bathed every three hours in hot water. If there is much nausea and vomiting, give tincture of gelsemium, tincture aconite in mucilage or gum arabic or slippery elm water.

For twenty-eight or thirty hours avoid all kinds of food or nourishment until the ingesta, which has been taken, and which has produced these conditions, has passed through the bowels. At this stage, that condition which is termed fever, which is nothing more or less than reaction, or an effort to remove disease, becomes established. And here is a point where many physicians commit the fatal mistake by attempting to break up this reactive stage or this effort of the stimulation, relaxation, or depletion, which accomplishes this object, forces the system at once into a state of prostration of the nervous system, and brings on a state of collapse, from which very few children with this disease, react. An attempt to use strong medicine, as is so often done, increases the irritability of the stomach, vomiting, diarrhœa, which must be either attended with convulsions or congestion of the brain, or both; which are to be regarded as fatal symptoms. I have often met with cases where they had passed through all the dangerous stages, after which the use of a few doses and minute at that, of mercury even in what is called mercurius of the Homœopathic dispensary, has, within ten hours, as an average, been attended by death. And it is almost an exception to the rule to find a child who has ever been cured of cholera infantum where the use of mercury in any form has been prescribed; the active doses of podophyllin or any of the active resinoids in large doses, are just as much to be dreaded.

We suggest to the practitioners generally, to keep the pathological indications or tendency under control, and to establish a physiological condition as suggested in our remarks in the beginning on the treatment of this disease. It is far better to trust any and every child to the powers of nature than the use of any or all irritating machines or appliances ordinarily adopted. When the child passes into a convalescent condition, as it will ordinarily in ten days, be governed by the circumstances of the case with reference to the character and quantity of the food to be used, avoiding however, overfeeding in anything.

THE DISSIPATION OF MAMMARY TUMORS BY UTERINE MASSAGE.—Under the title of "Hysterical Breast," DR. EDWARD P. FOWLER (New York Medical Times) reports in minute and careful detail three cases of hysterical women suffering from painful tumors in the breast, which disappeared solely, it would appear, as the result of manipulations directed to the womb. He says:

"From the three cases recited in this paper, together with several other confirmatory though less striking experiences, I am convinced that among other maladies connected with the female generative organism there is a class of breast-tumors, formidable in appearance, but which may be entirely controlled and dissipated by uterine manipulations, perhaps we might say uterine massage.

"From such experience as I have I should say that tumors of this kind are characterized by unusual hardness, freedom from attachments, great sensitiveness, especially upon light touch, absence of all other glandular swellings, hysterical temperament, and with more than an ordinary degree of sexual differentiation.

"I think they will generally be found in company with a tenderness in the upper cervical portion of the spine, sensitive ovaries, pressure upon which will give a sense of relief, even though it increases the pain, and with a uterine hyperæsthesia, unassociated with either ulceration or other inflammation.

"It probably would be most often associated also with a profusion of hair, heavy eyebrows, long lashes, and full lips, especially upper lip."

His first case was that of a young unmarried woman who had a tumor in the left breast about the size of a hen's egg. This was very tender, especially when attention was directed to it. The patient had a "never-ending pain" in the ovaries. Pressure upon them produced a sensation partly painful but partly pleasurable and erotic, and the pressure would throw the patient into a deep hypnotic sleep lasting from ten to sixty minutes. The girl had had hysterical attacks, and some of the relatives were epileptic. A vaginal examination revealed nothing. Several distinguished physicians and surgeons had examined the tumor and advised its removal. DR. FOWLER, after a careful study of the case, decided to make the same recommendation, but delayed doing so until his next visit. To his surprise he was told that his "treatment" had greatly benefitted her. Subsequent experience showed that the simple vaginal examination produced a steady improvement in the symptoms, the tumor grew smaller, and finally disappeared. The second and third patients gave histories of much the same character.

They are most instructive, as showing the marked influence of the generative organs over nutrition in such cases. It is well known that fibroid tumors apparently disappear spontane-

ously at times. In the present cases one can trace a tolerably clear connection between the relief of genital irritation and the disappearance of the new growths.—*Medical Record*, July 3, 1886.

THE INFLUENCE OF FLUIDS ON NUTRITION AND IN THE TREATMENT OF OBESITY.—There are two views held: the one, that liquids are inactive; the other, that they are of real influence. Of these views PROF. ROBIN accepts GENTH'S position—that water introduced into the stomach in large quantity augments the proportion of urea and salts in urine. But the further question is: Is this due to a more thorough washing of the urea already formed, or to an augmentation of the disintegration? He thinks it is partly due to the former; and that the tissues being more thoroughly freed from the products of their disintegratien, oxidation processes will be favored. FORSTER found not only increase of urea, but also of sulphur compounds, which were doubtless due to the breaking up of albuminoids. The next point to settle is whether the augmentation of the urea depends on increase in organic disintegration or on an exaggeration of combustion. From GENTH'S experiments and his own, PROF. ROBIN concludes that the ingestion of a large quantity of water augments combustion—that is, oxidation without augmenting equally organic disintegration. Obesity has two causes: In the one, assimilation is augmented; in the second, destruction is diminished. In the first class, water to be strictly curtailed or interdicted; in the second, the ingestion of a considerable quantity of water will entail a marked loss of fat. But the question has to be answered: How can we distinguish these two classes? This is accompanied by finding whether the quantity of urea is increased, diminished, or stationary. An increased excretion of urea shows that there is an increased assimilation, while on the contrary, a diminution of urea indicates very clearly a diminished oxidation. An individual makes little urea, either because he eats little or because oxidation is affected. In the first case, he eliminates as much nitrogen and carbon as he ingests, and he does not, therefore, become fat; in the second, the balance is in favor of ingestion, and he fattens. But the more numerous cases are those in which the urea is normal. In these cases, instead of estimating the urea, it is necessary to estimate the co efficient of oxidation; this is raised when obesity is from excess of assimilation, lowered when from *disassimilation*. It therefore follows that fluids ought to be freely administered in obesity when there is a small excretion of urea, or when the co-efficient of combustion is diminished; but fluids are to be abstained from in those who secrete much urea, or in whom there is an increase in coefficient of combustion.—*Physician and Surgeon*, July, 1886.

URETHAN IN INSANITY.—The Paris correspondent of the British Medical Journal writes: MM. MAIRET and COMAEMALE have addressed the following communication to the Academy of sciences: "We have administered urethan 300 times, to thirty-seven insane patients, with whose form of insanity we were acquainted. The dose varied from ½ gramme to 5 grammes, given in twenty-four hours. When we administered urethan to insane patients, with whose symptoms and conditions we were not thoroughly acquainted, it was given to them several times. The mental affections of the patients may be classed as follows: Mania, 13; lypemania, 2; imaginary persecution, with sensoral faculties perverted, 3; insanity, consecutive to mania or lypemania, 9; insanity, consecutive to atheromasia, 3; paralytic madness, 7. In paralytic insanity, and insanity from atheromasia, strong doses of urethan did not have any hypnotic effect. In the other forms enumerated the effect varied according to the excited state of the patient; when this is very intense, the drug does not have any hypnotic effect, but appears to increase the excitement. In less excited conditions, urethan produces sleep, which is calm, regular, and free from nightmares; the patient wakes up easily from a slight noise, or any other disturbing influence, but quickly falls asleep again. Sleep from urethan generally lasts from five to seven hours, and is not followed by any disagreeable sensation. Nutrition does not appear to be affected by urethan, even though it be given during fifteen days. From 2 to 5 grammes produce sleep, but not smaller doses: if 5 grammes be given as a first dose, and fail, it should not be continued. Its action is generally quick; sometimes two or three hours elapse before sleep results. Its action is not lasting; after two or three days, or six or seven days, according to the patient, it fails to produce sleep; its use must then be discontinued during some days. The earlier and the sounder the sleep resulting from its influence, the sooner is that influence exhausted." MM. MAIRET and COMBEMALE'S physio'ogical researches on the action of urethan, published in the Comptes Rendus de la Société de Biologie, March 20, 1886, indicate that this substance acts directly on the nervous system.—*Weekly Medical Review*, June 5, 1886.

NITRO-GLYCERIN IN BRIGHT'S DISEASE.—The employment of nitro-glycerin in chronic renal disease, for the valuable service in dispelling or moderating uræmic symptoms, is based upon the fact that high arterial tension is the constant concomitant of uræmia. How far it is desirable to habitually employ a remedy having so pronounced an action upon the circulation as nitro-glycerin is yet undetermined; but experience of its value in the diseases which are marked by abnormal arterial tension is accumulating. The latest contribution is by DR. KINNICUTT, of New York (Medical Record, April 17, 1886), who has studied the effects of the drug in several cases, with results which harmonize with those obtained by ROSSBACH and BURZBINSKI, to which allusion is made. The continued employment of the drug in slightly increasing quantity does not only relieve headache, dyspnœa, palpitation, and other symptoms referable to the uræmic state, but is marked by an increase in the diurnal excretion of urine, together with a notable diminution in the amount of albumen in it. Cases are given where the albumen was estimated quantitatively, and they show that in some the

drug has a marked effect in its reduction. At the same time, as one shows, there is often great variability in the albuminuria of chronic nephritis, which renders it important that similar observations should be made on a large scale before trustworthy conclusions can be be arrived at. The amount of nitro-glycerin administered should be just within the limit of producing any subjective symptoms. DR. KINNICUTT'S conclusions may be given in his own words: "1. That in nitro-glycerin, given in small doses and frequently repeated, we possess a powerful agent for lowering the increased blood-pressure which is very constantly associated with the development of uræmic symptoms. 2. That it has the power to control or relieve many of the paroxysmal disturbances of the nervous system which are included under the general term of uræmia; of these, headache and asthma are especially benefited by its use, the relief being more marked and continuous than that obtained either by opium or chloral. 3. That its influence upon the daily excretion of urine and serum-albumen in parenchymatous and interstitial nephritis is apparently to increase the former and diminish the latter. 4. That in the systematic and prolonged use of nitro-glycerin in appropriate doses, in chronic nephritis, we possess a means of maintaining more or less continuously a lowered blood-pressure, of often averting or relieving critical conditions, and thereby prolonging life."—*Lancet*, June 12, 1886.

THE TREATMENT OF ALOPECIA.—From an article entitled "Alopecia—Its Etiology, Diagnosis and Treatment," by DR. J. C. MCGUIRE, appearing in the American Practitioner and News, we excerpt the following remarks on treatment:

"Those who believe in the neurotic origin of the disease recommend both constitutional and local treatment. HEBRA, though accepting this theory, does not speak of constitutional treatment. DUHRING regards internal treatment as of the greatest value. Most observers recommend either arsenic, phosphorus, nux vomica, or iron. Of these drugs, WILSON holds arsenic to be the most important. In spite of KAPOSI'S statement that remedies have little or no effect on the disease, a vast number of external remedies have been highly recommended by different authors. The very fact that so many have been advised tend to show that this eminent authority is right in his conclusions, and that few drugs have any power in hastening a cure. RINDFLEISCH speaks of the rapid improvement following the use of equal parts of tinc. capsicum and glycerin. Good results are said to follow the use of electricity; in a case reported by DR. G. H. FOX, the hairs made their appearance in a week after the beginning of this treatment. PINCUS believes that he has demonstraten the favorable influence of sodium chloride on the growth of hair. Sulphur in the form of ointment is also highly recommended. UNNA says that all cases are greatly improved by it in a short time, and completely cured under its long-continued use.

Chrysarobin is well spoken of by HUTCHINSON. I have seen the hairs begin to grow in a short time after blistering the scalp with croton oil. I use a mixture of two parts of white wax and cocoa butter to one of the oil, in stick form. Such stimulants as tinc. capsicum, tinc. cantharides, and liq. ammoniæ are frequently recommended in combination, but, as JACKSON says, there is no good reason for combining these remedies. Since our object is to stimulate the hair bulbs, I believe that electricity promises the best results. In my own practice it has proved very serviceable. HEBRA recommends the use of soft soap and the sulphur ointment.

ANTISEPSIS OF THE DIGESTIVE TRACT.—In a recent work on gastric dilatation, LEGENDRE presents a discussion of intestinal antisepsis, which may be summarized as follows:

A medicament administered for the disinfection of the digestive tract should be but slightly, if at all, absorbable.

It should be capable of administration in efficient doses without producing toxic effects, and must exert its specific effect in the long transit from mouth to anus.

The salicylate of bismuth recommended by VULPIAN, is of interest in this connection. The salt is gradually decomposed in its passage through the intestine into a black sulphide, with a simultaneous slow liberation of salicylic acid, which is subsequently eliminated by the kidneys.

Iodoform, exhibited for the same purpose, is slightly decomposed, traces of iodine being found in the urine, and the major portion of the drug passing out unchanged with the feces.

Naphthaline is similarly excreted, the urine being slightly tinged, though the greater part of the dose is unchanged by digestive fermentative action. BOUCHARD strongly recommends the following mixture for typhoid and other similar putrefactive conditions of the intestinal contents:

℞ Glycerin, 200 parts.
Pulverized charcoal, 100 parts.
Naphthaline, 5 parts.
Iodoform, 1 part.

A teaspoonful of the mixture is given in a wineglassful of water every two hours.

In gastric trouble, with diarrhœa of less intensity than in typhoid, the naphthaline may with advantage be administered alone, as follows:

℞ Naphthaline,
Pulverized sugar, ää ℈iv.
Oil of bergamot, gt. j.

This is mixed and divided into 20 powders, one of which is given every hour.

The last two methods of treatment are more efficacious than the administration of salicylate of bismuth, or of water saturated with carbon disulphide. The relative value of these various methods of intestinal disinfection has been experimentally determined by intravenous injections of the diarrhœic flux obtained before and after each method of treatment respectively.—*Revue de Thérapeutique.*

EUCALYPTUS AS A TOPICAL AGENT.—DR. P. T. WILLIAMS thus writes in the Cincinnati Medical News:

I have never seen, so far as my recollection

serves me, eucalyptus recommended as a topical remedy in any of the medical journals, nor do I remember of ever having heard any of my professional brethren speak of having employed it in that capacity. I was lead to use it over the inflamed surface in a case of erysipelas, by being told by an old sailor who, at an early period of his life, had sailed through the southern seas of the eastern hemisphere, that he had been treated by a physician in some one of the East India islands for erysipelas by the external application of it.

I have, therefore, to report that in three cases of erysipelas, one affecting the face and right leg, another the face, and another the scrotum, the itching and burning sensation, and the exudation of the peculiar gummy discharge, were promptly arrested by the application of the fluid extract of eucalyptus.

In a case of caries of the tibia, with extensive inflammation of the skin, attended with the formation of numerous blebs and small ulcers, the happiest results followed upon the local use of the fluid extract of eucalyptus. In the case of erysipelas it was applied, by means of a camel's-hair brush, every four hours. In the case of disease of the tibia I employ it twice daily. In each of these cases appropriate internal treatment was made use of.

My experience with eucalyptus as a topical agent, of course, is too limited to base much of an estimate in regard to its value, but the seeming beneficial effects following in the few cases I have mentioned encurage me to believe that it can often be used with advantage locally—that there can be obtained from it all the benefits that are to be had by the employment of the tincture of iodine, solutions of nitrate of silver, salts of iron, etc, etc., and that it can be made use of when these could not be, in consequence of some objectionable features attending their application. I propose using it in other cases that may come under my care, and I hope others may try it, so that if it possesses any claims as a local remedy they may soon become established.

The Advantages of Antipyrine as a Hæmostatic.—The Independencia Medica reports the following conclusions of Dr. Cosati, after having determined the hæmostatic property of antipyrine by the good results obtained in many different kinds of hæmorrhage:

1. Antipyrine is a powerful hæmostatic.
2. It is superior to perchloride of iron, because it leaves the wound perfectly clean.
3. It is superior to the thermo-cautery, because it leaves no eschar.
4. It is even superior to ergotine, because it has no toxic effects if the doses are not too enormous.
5. In most cases it is preferable on account of its double antipyretic and antiseptic action.
6. The hæmostatic action takes place in a very short time.

In a strength of four to five per cent. antipyrine has givem the best results, as the following cases, in which a four-per-cent. solution was used, will show:

A lying-in woman had a number of hæmorrhages after labor, upon which the continual internal use of ergotine had no effect. After several repetitions, the bleeding was discovered to issue from a laceration of the cervix, in which the application of the perchloride of iron caused but a temporary arrest. One simple bathing of the region in a four-per-cent. solution of antipyrine arrested the hæmorrhage, which did not recur.

We performed one operation for vesico-vaginal fistula without being disturbed in the least by the flow of blood; as soon as it appeared it was instantly arrested by simply touching the part with a brush dipped in a four-per-cent. solution of antipyrine. The same service was rendered by a four-per-cent. solution in two cases of perineorrhaphy.

Injections or irrigations made directly against an ulcerated epithelioma of the cervix have the following advantages: Arrest of hæmorrhage, diminution of the sero-purulent discharge, which loses its odor, cessation of the throbbings, which are premonitory of hæmorrhage and so annoying to patients.

A four- or five-per-cent. solution of antipyrine in glycerin would be useful as dressings in cases of fungus ulceration. The hæmostatic action of antipyrine could thus be combined with the depleting action of glycerin.

Benzoic Acid to Prevent Fungi in Alkaloidal Solutions.—Dr R. G. Eccles, in the Pharmaceutical Record, alludes to the claims of the chemical antiseptics for use in securing the permanency of alkaloidal solutions. His remarks, which we subjoin, are of practical interest to physicians:

"If a choice must be made between chemical antiseptics, there is no reason why we should confine ourselves exclusively to either salicylic or boric acid. As the query only refers to these, it would seem to imply that no others are available. Fashion sways here as in dress. No lady likes to appear in a bonnet not in full fashion, for fear of seeming to be eccentric. These two acids are now 'all the rage,' and whoever advocates anything else is considered cranky. Benzoic acid, hydro-naphthol, mercuric chloride, and other non-irritating substances have been successfully used in surgical practice, and are available in pharmacy as well. As between salicylic and boric acid, the latter is considered the best in collyria. It is much more soothing, notwithstanding the fact that it requires nearly forty times the amount to do the same work. All who have tried the two upon their conjunctivas, never hesitate in giving the preference to boric acid. Dr. Squibb now prefers it to everything else, and thinks that a better article for the purpose is unnecessary. Certainly its almost negative medical qualities would seem to commend it here. It is soothing to inflamed tissues, and is not likely to be physiologically contraindicated in many cases. The writer's choice, however, after a trial of many kinds, is benzoic acid. Applied to the eyes in solutions of more than double the strength necessary to protect, it does not produce the least irritation. One grain has about the same antiseptic power as a dram of boric acid. In fruit juices the flavor is not in the least impaired by it, and in alkaloidal solutions no nauseous taste is superimposed on that of the active ingredient. Like all others, it is sometimes contraindicated, but less frequently than salicylic acid, and no oftener than boric. It is excreted as hippuric

acid, a normal constituent of urine, thus indicating that it adds force to the body, and not like salicylic acid, stealing force away by being excreted as salicyluric acid—a combination of itself and glycol.

IODOFORM SPRAY IN THROAT AFFECTIONS.—In a recent letter to the editor of the London Lancet DR. GEO. MUNDIE calls attention to the marked and rapid relief afforded by iodoform spray in throat affections accompanied by congestion and engorgement, and suggests its use in pertussis. We quote from his letter as follows:

In the different articles on the use of iodoform I do not remember any allusion having been made to its use in the form of spray, although for a long time I have supposed in many conditions of throat affection, and perhaps even pertussis, it might be so used advantageously; lately, however, I have employed it in many cases, and have been struck with the rapidity with which it often gives marked relief. The ether in which it is dissolved appears to immediately constringe the congested capillary vessels, while the iodoform being deposited in a thick film is more efficiently applied and retained longer, and by its sedative influence continues to relieve the tension and engorgement, as an instance of which I give the following case:

On Tuesday last a man, a carpenter by trade, consulted me. He said he had been shivering all day at the bench (he looked very ill), and had some aching pains over the body, especially the back, and the throat was very sore; on examining which I found the whole fauces, uvula, etc., bright-red and slightly swollen; pulse 110; temperature 102.5°. I advised him to declare upon his club at once, as I thought he would require at least a week's rest. I well sprayed his throat, and he expressed himself immediately as feeling relieved. I gave him also some mindererus and a Dover's powder to be taken at night. Next day he called upon me, saying he felt quite well, and that his sore throat was quite relieved. I have used iodoform mixed with sugar, benzoate of soda, and other ingredients, applying it by means of a camel-hair brush; but as it is often difficult to get it to adhere, I consider the spray much more efficacious. I use a spray bottle, which I can use with one hand and depress the tongue with the other.

THE FURTHER EMPLOYMENT OF BACTERIO-THERAPY.—We have already called attention to the novel method of treating pulmonary tuberculosis proposed by PROF. CANTANI, of Naples, viz., the inhalation of fluids containing the bacterium termo. Further trials of this have been made by DR. BREHMER at his hospital at Görbersdorf (Allgemeine Med. Centr.-Zeitung, 1886, No. 28), and recently again by Dr. Laaser, of Breslau (Ibid., No. 34). DR. LAASER states that among seven patients whom he treated by the new method two were improved and one was cured. The first case in which there was improvement was that of a young peasant woman, who was treated also by lavage and antipyrine. Some of the improvement was ascribed to these latter measures. The second patient was in the third stage of phthisis and bed-ridden. After the inhalations she was able to get up and go about, her temperature fell, and her bodily strength increased. She then had an attack of localized pleurisy, and as the inhalations caused vomiting they were discontinued. The third and "cured" case was that of a young laborer, who, when admitted to the hospital, was found to have a large cavity in the right lung. His evening temperature was 39.5° C., and the expectoration was copious and fetid. Inhalations of turpentine and carbolic acid lessened the odor, but did not relieve the fever, and the patients strength continued to fail. Tubercle bacilli being found in the sputa, he was placed upon daily bacterial inhalations. The odor of the sputa soon disappeared, as also did the bacilli, the patient's condition steadily improved, and in four weeks he was discharged cured!—*Med. Record*, June 19, 1886.

NITRATE OF SILVER IN THE TREATMENT OF DYSENTERY.—Among our Translations is an extract from La Cronica Medica, detailing a method, common in Peru, of treating dysentery with nitrate of silver.

This treatment is said to have been found remarkably effectual in that country, where dysentery is peculiarly malignant. There is good reason to believe that success might have been much greater in the treatment of this disease in all countries, had this or some similar method been more generally resorted to. It is not easy to see, however, why injections should be used only in the worst cases, while the medicament is given by the mouth (in which case its effect is nil) in those of a milder type. Undoubtedly the action of the remedy is mainly local, and for that reason its use by injection cannot be too early resorted to. If the alimentary canal is at once and thoroughly cleared with a brisk saline purgative, malaria combated when present, injections of nitrate of silver, Monsel's solution, or some similar substance made, not often enough to prove destructive to the intestinal lining, and lastly all sense of pain obviated with opiates, there is little reason why dysentery should ever add materially to our list of mortality.—*American Practitioner and News*, June 26, 1886.

OIL OF WINTERGREEN FOR DIARRHŒA.—Last summer I read a report that salicylic acid was a remarkable remedy for diarrhœa of children in hot weather. I tried the drug with only moderate success, and moderate confidence, for I had become disugsted with its failure in rheumatism. Shortly afterwards I read in an English journal that salicylic acid or oil of wintergreen, not made from the plant, was inert as a germitoxic, and not valuable in rheumatism. Then I began to hunt around for the genuine drugs, writing to various makers to guarantee their articles. A Philadelphia house replied with great dignity, stating that "the reputation of their house made a guarantee unnecessary." I then applied to PARKE, DAVIS & CO., and secured the drugs, and began to use them. I was greatly pleased with the use of oil of wintergreen in diarrhœa of children. The children will take it and like

it, and summer diarrhœa and oil of wintergreen will not inhabit the bowels of a child together. There is an antagonism there which counts. I will not attempt to give reports of cases in this connection, but I have more reliance in the drug than all other methods or remedies together, in this disease, as well as many others.—DR. CURTIS, in *Peoria Medical Monthly.*

WHITE OF EGGS IN OBSTINATE DIARRHŒA.—From the Allg. Med. Cent. Zeit., we learn that CELLI has recently called attention to the curative properties of the albumen of hen's eggs in severe diarrhœal affections. In a discussion before a medical society in Rome, he advocated its use, and related two cases of chronic enteritis and diarrhœa, which, having resisted all treatment, speedily made complete recoveries under the use of egg-albumen. The same diet is strongly recommended in the diarrhœa accompanying febrile cachexia and in that of phthisis. In two cases of diarrhœa dependent upon tertiary syphilis, it was found of no avail. On post mortem examination, diffuse amyloid degeneration of the arterioles of the villi was found in these cases. The whites of eight or ten eggs are beaten up and made into an emulsion with a pint of water. This is to be taken in divided quantities during the day. More may be given if desired. The insipid taste can be improved with lemon, anise, or sugar. In case of colic, a few drops of tincture of opium may be added.—*Med. and Surg. Reporter.*

GERMICIDAL TREATMENT OF CHOLERA INFANTUM AND THRUSH.—DR. WALLACE A. BRIGGS (Pacific Med. and Surg. Jour., May, 1886), says that the only radical treatment of cholera infantum is germicidal. Formerly calomel and latterly carbolic acid, chloral hydrate, and mercuric chloride have been used, but these are all eclipsed by the yellow oxide of mercury. Adjuvant treatment, of course, should not be neglected. nor should the fact for a moment be lost sight of, that once rid of the microphytes in this disease, the patient is convalescent.

Thrush is one of the few diseases whose microphytic nature is unquestioned by cavil itself. It is promptly relieved by germicides conjoined with tonics and proper hygienic and dietetic regulations.—*The Epitome*, June, 1886.

ANTISEPTIC COLOGNE.—The introduction of an agreeable and at the same time powerful antiseptic has been accomplished by MESSRS. PARKE, DAVIS & CO., of Detroit. The term antiseptic is hardly sufficient to express the action of an alcoholic solution of bi-chloride of mercury, of the strength of one grain to the ounce of fluid.

This cologne sprayed freely into the air of the lying-in chamber and the apartments occupied by consumptives, will be found sufficient to arrest, or at least delay the processes of decomposition in putrid matter.

In cases of tuberculosis the cologne has valuable therapeutic properties.—*Progress*, July, 1886.

HYOSCYAMINE IN DELIRIUM TREMENS.—DR. F. TIPTON, of Selma, Ala., has had most satisfactory results with Merck's hyoscyamine, in doses of 1-20 grain hypodermically administered, in the treatment of all the distressing symptoms of delirium tremens. He writes: "It has never yet failed me, nor have I experienced any bad results from this drug in these doses. I treat all cases of delirium tremens with this drug as soon as chloral and the bromides fail, and they all get well rapiely. I use the following formula, which I obtained from DR. P. BRICE, of the Alabama State Insane Asylum: ℞ Hyoscyamin, Merck's, gr. j.; alcoholis, ʒ j; aquæ, ʒ j. M. Sig.—Inject from five to ten minims for one injection."

A NOVEL METHOD OF TREATING HYSTERIA.—RUAULT (France médicale; Practitioner, May, 1886) affirms that he has frequently controlled an hysterical fit by making firm pressure with the thumbs on the supraorbital nerves at the supraorbital foramina. The patients are described as first contracting the facial muscles as if in pain; they then cry out and take several inspirations, followed by a long expiration. They now relax their muscles, and the convulsion is at an end. Pressure should not be maintained after this, lest another attack be excited.

PERMANGANATE OF POTASSIUM AS AN ANTIDOTE TO SNAKE POISON.—GEO. CRESSWELL in Med. Press and Circular reports the result of some experiments on a rabid dog tending to show that permanganate of potassium is an effectual antidote to snake poison.

In DR. BRUNTON'S valuable work we read that permanganate of potassium neutralizes cobra poison if mixed with it outside the body, but has no remedial effect apparently, if injected after a bite.

MENTHOL IN THE TREATMENT OF URTICARIA.—Union Médicale for May 22, 1886, suggests the following simple remedy: Dissolve a small quantity of menthol in alcohol, and apply to the spots as a lotion. This preparation is said to be equally soothing in the case of insect stings.—*Amer. Pract. and News*, June 26, 1886.

A SIMPLE REMEDY FOR CHRONIC DIARRHŒA.—Under the above caption DR. C. T. SMITH, in the Medical and Surgical Reporter, laments the tendency of the medical profession to ignore simple remedies, and illustrates the value of a saturated solution of salt and cider-vinegar in chronic diarrhœa by the narration of two cases.

HYPODERMIC INJECTIONS OF EUCALYPTOL IN PHTHISIS.—ROUSSEL (Allg. Wiener Med. Ztg.) reports favorable results following the use of this treatment; purulent sputa became mucous, the appetite and strength returned, and the cough was relieved.

The Medical Age.

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CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, June 21, 1886.

The President, E. J. DOERING, M. D., in the chair.

DR. F. E. WAXHAM read a paper entitled

INTUBATION OF THE LARYNX AS A SUBSTITUTE FOR TRACHEOTOMY, WITH A REPORT OF EIGHTY-THREE CASES.

The author referred to the various modifications that had been made in the instruments within the past year. First, the enlargement of the heads of the tubes to prevent slipping into the trachea; second, the addition of a shoulder to prevent their expulsion; and third, a very important modification consisting of the construction of the tubes with thinner walls, giving greater breathing space and a better opportunity for the expulsion of false membrane. The author also presented a feeding bottle useful in those cases where they entirely refuse to take nourishment, as they will do occasionally, and also a trachea forceps for the purpose of removing false membrane by way of the mouth when there is detachment below the tube, or when it is pushed down ahead of the tube and cannot be expelled.

The author thought that the first question that would arise, in considering whether we had a substitute for tracheotomy in tubage of the larynx, would be as to the comparative success of the two methods. By personal inquiry and by correspondence he had collected reports of 306 cases of tracheotomy performed in Chicago with 58 recoveries, or a percentage of 18.05. These cases were as follows:

One physician reported 3 cases with 3 recoveries; another 7 cases, 3 recoveries; another 33 cases, 9 recoveries; another 25 cases, 5 recoveries; another 30 cases, 6 recoveries; another 12 cases, 5 recoveries; another 20 cases, no recoveries; another 14 cases, no recoveries; another 8 cases, no recoveries; another 15 cases, 1 recovery; one 16 cases, 1 recovery; another 15 cases, 3 recoveries; another 9 cases, 1 recovery; another 1 case, no recovery; another 4 cases, no recovery; another 1 case, no recovery; another 3 cases, no recoveries; another 8 cases, 2 recovery; another 1 case, 1 recovery; another 2 cases, no recoveries; another 5 cases, 1 recovery; another 3 cases, 1 recovery; another 4 cases, 1 recovery; another 1 case, no recovery; another 1 case, no recovery; another 3 cases, no recoveries; another 1 case, no recovery; another 2 cases, 1 recovery; another 4 cases, 2 recoveries; another 1 case no recovery; another 3 cases, 1 recovery; another 2 cases, 1 recovery; another 5 cases, 1 recovery; another 3 cases, 2 recoveries; another 3 cases, 2 recoveries; another 1 case, no recovery; another 3 cases, 1 recovery; another 1 case, no recovery; another 2 cases, no recoveries; another 4 cases, 1 recovery; another 2 cases, no recoveries; another 2 cases, 1 recovery; another 6 cases, 1 recovery; another 1 case, 1 recovery; another 3 cases, no recoveries; another 1 case, no recovery; another 1 case, no recovery; another 3 cases, no recoveries; another 2 cases, no recoveries; another 2 cases, no recoveries. Total, 306 cases, 58 recoveries.

In 138 cases the ages were as follows:

One was 2 years and 2 months old; 1 was 7 months; 1 was 13 months; 1 was 12 months; 1 was 20 months; 1 was 2 years and 5 months; 1 was 2 years and 3 months; 1 was 3 years and 3 months; 1 was 4½ years; 1 was 5 years and 7 months; 1 was 6½ years; 1 was 7½ years; 1 was 19 years; 1 was 24 years; 6 were 18 months; 9 were 2 years; 2 were 2 years and 4 months; 4 were 2½ years; 19 were 3 years; 7 were 3½ years; 14 were 4 years; 16 were 5 years; 3 were 5½ years; 16 were 6 years; 6 were 7 years; 8 were 8 years; 5 were 9 years; 4 were 10 years; 2 were 12 years; 3 were 13 years. This gives an average of 5 years and 1 month.

In contrast to these statistics the author reported 83 cases of intubation with 23 recoveries, or a percentage of 27.7. The ages were as follows:

No. Cases.	Age.	Recoveries.
1.....	9 months.....	0
1.....	11 months.....	0
1.....	13 months.....	0
3.....	14 months.....	1
1.....	15 months.....	0
1.....	16 months.....	0
1.....	17 months.....	0
1.....	18 months.....	1
1.....	20 months.....	1
7.....	2 years.....	2
2.....	2 years and 1 month.....	1
2	2 years and 2 months....	1
2.....	2 years and 3 months....	0

No. Cases.	Age.	Recoveries.
3.....	2 years and 6 months....	1
1.....	2 years and 9 months....	0
12.....	3 years.....	2
1.....	3 years and 4 months....	1
1.....	3 years and 6 months....	0
11.....	4 years.....	5
1.....	4 years and 9 months....	1
3.....	4 years and 6 months....	0
9.....	5 years.....	4
6.....	7 years.....	1
1.....	7 years and 6 months....	0
2.....	8 years.....	1
1.....	11 years.....	0
7.....	———.....	0
83		23

Average age, 3 years and 7 months.

It will be observed that 11 cases with 3 recoveries were under 2 years of age; 28 with 8 recoveries under 3 years; 14 cases with 3 recoveries between 3 and 4 years; 15 cases with 6 recoveries between 4 and 5 years; 9 cases with 4 recoveries between 5 and 6 years, and 10 cases with 2 recoveries between 7 and 11 years.

Many of these cases were young nursing infants, and many were delegated to him because they were too young or too unfavorable for tracheotomy. Of the 58 cases coming under his own personal observation, 20 were actually moribund when the operation was performed, many of them entirely unconscious, and 40 were bad diphtheritic cases characterized by severe constitutional symptoms and extensive diphtheritic exudation upon the pharyngeal walls. In only 18 cases was the exudation in the pharynx slight, but in every case, without exception, membrane was expelled either in the form of a thick muco-pus, shreds or large casts. In every case the operation was performed to prevent impending suffocation, and the cases pronounced hopeless without surgical interference.

Dr. D. A. K. Steele, in opening the discussion, said that of course the principal interest to the surgeon centres in the question of the performance of tracheotomy in croup or diphtheria. I have looked up some of the older statistics, in addition to those given by Dr. Waxham. The French seem to have led the way in the practice of tracheotomy. Trousseau, in 1858, gave the statistics as about 25 per cent. of recoveries, and from later reports tracheotomy does not seem to have gained much. Dr. Solis Cohen, of Philadelphia, in 1883 recorded some 5,000 cases, and his per cent. was the same as given twenty-five years before, by Trousseau, about one in four. More recent statistics show some improvement in tracheotomy, for example, Dr. Jacobi, of New York, published 1,000 cases in which he had a little better success, if I remember correctly, than those reported by Solis Cohen. A few days ago I saw a report of seventy-seven cases from the Boston City Hospital, with a recovery of twenty cases, about 25 per cent. In Chicago the statistics, as given by Dr. Waxham, are 306 cases with a recovery of about 19 per cent.; these are the most recent statistics I have found. Of course in regard to the report of cases of tracheotomy, we have to bear in mind a very practical point—that is, that the unfavorable cases are not all reported. The majority of physicians who do a few operations and have not a successful result do not record their cases. In New York City some twelve years ago a surgeon reported 67 cases with 13 recoveries. He made operations on 100 additional cases before he had another successful one; so there are curious mixtures and changes in the statistics of different operators.

Another point is that a good many surgeons report as successful, cases that recover from the operation, but that die of some other affection or sequelæ, as this case reported by Dr. Waxham, dying from albuminuria; all these cases are reported by tracheotomists as recoveries; but they are not recoveries from the diphtheritic croup. These points must be borne in mind. When we sum up, the statistics to-night would show a recovery of 27 per cent., which certainly seems to me to be a very favorable showing. In addition to these cases reported by Dr. Waxham, Dr. O'Dwyer has of late recorded 25 cases, with a recovery of 24 per cent.; taking all those into consideration, the Chicago record is ahead of the New York record by 3 per cent. In regard to the Boston City Hospital, where they had 25 per cent. of recoveries, we should bear in mind that those cases presumably have much better surroundings than we have in Chicago, or in general practice. There they have the best of nursing and immediate attention in case any mishap occurs, which in some cases in private practice might go unnoticed for many hours. With the favorable surroundings so far as the operation and the after-treatment are concerned, the reported recoveries of 25 per cent. are as favorable as we could expect.

Intubation is a comparatively new operation, but with the improved tubes (a serious defect in the construction of these tubes has been that the lumen was too small) I think that by enlarging the calibre of the tubes the percentage of recoveries would be increased. There would be less danger of rolling up the detached pieces of matter, and I think that expectoration would occur more freely. It is supposed to be necessary to have the tube extend down near to the bifurcation of the trachea, so as to prevent the curling pieces of membrane blocking up the opening, but I think they are longer than is necessary. The principal obstruction, we know, is at the larynx, the membrane below the trachea is thinner, smaller, and is not

likely to curl up in this way. Theoretically, the tube should be long; practically, it might be shortened, and with the improved tubes we will get still better results.

A point in favor of intubation over tracheotomy is the rapidity with which it can be done, taking only the fraction of a minute to insert a tube in the hands of an experienced operator. We might also take into account the greater comfort of the doctor after the operation; the feeling of security with the laryngeal tube. I am constantly in dread after tracheotomy, watching and waiting, and seeing the little patients upon whom I have operated, die one after another. Then the relief from dyspnœa seems to be quite as great after intubation as after tracheotomy. The relief from urgent symptoms is just as marked with the introduction of the laryngeal tube as with tracheotomy. In case we find intubation does not afford permanent relief, it is no bar to tracheotomy subsequently, although where intubation does not relieve dyspnœa, tracheotomy will not relieve it; where stenosis is not relieved by the introduction of the tube, it does not relieve the dyspnœa.

Dr. W. E. Casselberry said his experience either with intubation, or with tracheotomy, has not been very extensive, but from it and from what he had gleaned from the literature of the subject, including the valuable paper presented to-night, he was very favorably impressed with the operation of intubation. The most favorable statistics of tracheotomy are those of not only the French, but more particularly of the large hospitals of France and Germany. In these institutions they have the fullest command of the patients in every way, the greatest attention can be paid them, and the operation can be and is performed early. The most favorable statistics are those of Plenio (Konigsberg)—and of all the cases that were taken to the hospital, but five escaped tracheotomy, showing that almost all were subjected to the operation. The case of Dr. Ingals, in which the membrane was removed from one of the bronchial tubes was a most brilliant one, but then intubation does not prevent tracheotomy from being performed afterwards. The forceps for the removal of the membrane through the mouth, which the author has exhibited this evening, is new; I have not much confidence in it, but perhaps it may be of value. In reference to the length of the tube, somebody has proposed that it should be shorter. I think it is the length of the tube which has rendered this operation successful over the operation of some eighteen or twenty years ago. It was invented by a French surgeon at that time, but the tube was only about ¾ of an inch long, sufficient only to reach into the larynx, where it excited irritation, and the operation was discarded as of no value; so that I think in the length of the tube we have an important feature. In reference to the introduction of the tube, if it is possible to practice on the cadaver, it would be of great value; a a minute is a long time when you are introducing a tube into the larynx of a child who is suffocating; you gag the mouth, introduce the forefinger as a guide to the larynx, follow it by the tube; the child stops entirely his feeble respiration, in a few seconds he becomes black in the face, and you are very anxious either to get the tube in or your finger out. If we bear in mind the instructions of the author of this paper to pass the tube under and not over the forefinger as a guide, I have no doubt we will be successful. And recollect that the curve into the trachea is a right-angled curve, so you must turn acutely and not obtusely, or you will enter the œsophagus and not the trachea. The food of the patient is a most important point; when the tube is in, liquids will frequently run into it and excite irritation.

Dr. A. B. Strong said: Before coming here I was prepared to endorse this operation to a great extent. I did not suppose the statistics were so favorable, but I am glad to find they are so. I have had quite a number of cases of intubation and of tracheotomy, and I must say I much prefer the introduction of the tube. However, not every case is adapted to the intubing; I think there are many cases where tracheotomy would be far preferable. We can feed a little patient after tracheotomy much better than after intubation of the larynx; to introduce a stomach tube would require the attendance of a physician several times a day. I have not yet given a fair trial to introducing the food into the rectum. I should not want a little patient that had suffered for three or four days before the operation to go without food; I like to feed my patients well, and certainly would not wish to starve them. There are three or four cases that have given me a good deal of information. The operation is new; we do not know all there is about it. One of the first cases that I had of true diphtheria, where intubing was done, was a little boy four years of age, taken sick five days before I saw him. The physician in attendance had given the child up, and I was called in. The little fellow was as near dead as any patient I had seen, but I would not have recommended tracheotomy in that case. The neck was badly swollen. Patient was cold, clammy, pulseless, and cyanosed. Pupils widely dilated; apparently just on the verge of dissolution, mainly from profound blood-poisoning. I introduced the appropriate tube, and much to my surprise I nearly strangled him; indeed, for a moment I thought him dead. I drew the tube out and the child breathed a little bit better. It occurred to me that I might have crowded the membrane down. I introduced the tube again, with

the same result; he was nearly strangled. I tried a smaller tube, but each time the tube went in the child nearly died. I laid him on the bed and surrounded him with dry heat. Brandy hypodermically. I did not suppose the child would live more than an hour, but to my surprise I received a telephone that he was alive and doing well ten hours afterward. I went to see him and found him with a good color, taking considerable nourishment. I called again in six hours just in time to see the child die. I had the privilege of post-mortem, and found exactly the condition of affairs I had anticipated. At the lower portion of the trachea I found a cast of that membrane crowded down. This case had been going on about five days when I saw it, and this membrane had been loosened in the meantime and so crowded down.

Another case was of a good deal of interest. A little girl eight years of age had a mild attack of diphtheria four days prior to my seeing her. Two days before I saw her the larynx first became involved, and gradually grew worse. The case was one of the most favorable for operation that I have seen. We introduced the largest size tube and it remained in position for three days, and within 24 hours the lungs cleared up very nicely; at the end of three days and two hours the tube was removed with comparative ease, and I noticed that the child did not breathe as freely as I thought she would, I remained about an hour, and during that time dyspnœa set in and the child nearly choked to death; we put in the one next in size and the symptoms were instantly relieved. The child wore that tube two days, when it died from bronchitis.

That case gave me this idea: the tube first introduced was as large as the parts would readily take in—it required a little forcing to introduce it—and it occurred to me that the tube was larger than was necessary. It remained there three days and two hours, squeezing the blood out from these parts, and when it was removed the sudden reaction caused the œdema of the larynx. The child wore that tube five days and a few hours, and until the last 12 hours of its life was getting along very nicely, except that it did not take the amount of nourishment I considered necessary. This operation is brilliant, and has a future before it, and I can heartily endorse it to-day. I am perfectly willing to try it, and I would prefer, in case of one of my own children, intubing the larynx to opening the windpipe.

Dr. Christian Fenger said: The subject is a most important one. As to the history of the operation, I would say that it is not a new one. A French surgeon, Loiseau, invented it in 1858, and to him belongs the idea. The instruments were, in the principle, about the same as we use now; there have been modifications in deaths only. Tubage was tried in France by Gros, but seems not to have found favor, although Bonehut recommended it without having used it himself. It was tried in Vienna by Weinlecaner, who recommended it, condemned by Steiner and Ziemssen, and given up again. In reference to what was said about patients not swallowing at all for the first 24 hours, it seems to me that it would be difficult to keep little children from drinking milk, or water perhaps, milk anyway, because they are always thirsty. There will thus be danger from foreign body—pneumonia (Schluck pneumonia). It might be that feeding bottles will obviate that danger. A second point is this: I saw a child treated by intubation die from loosened membranes closing the bifurcation. Whether the membranes were entirely loose or not, or loose above and attached below, is not materially important. The case convinced me that I would have felt safer with tracheotomy, because loosened membranes can be reached easier the tracheotomy tube than through the larynx. As to the statistics, it is quite certain that the tracheotomy statistics are a little better than have been given here to-night. In the large hospitals in Germany the recoveries reach up, in the last few years, to 31 per cent., that is in itself reason enough for a trial. All these points are not exactly exclusively in favor of intubation, but, like Dr. Strong, I should first try the tube, if it was my own child, and watch the patient incessantly, with the tracheotomy instruments on the table to be ready at any time when needed to resort to tracheotomy.

Dr. S. Stockton was in favor of intubation.

Dr. R. G. Botge said: There is much to recommend intubation I believe. The testimony we get is certainly enough to recommend the operation and to establish it as a practical procedure and one worthy of trial. It affords probably as much relief for the urgent symptoms, the one for which tracheotomy would be resorted to, as tracheotomy would; and the length of time that the tube is to be worn will be shorter than with the tracheal tube. There are reasons why it should; from the pressure of the tube upon the membrane the presence would be likely to cause some disintegration of the membrane, and in that way the membrane would be taken away or gotten rid of sooner than without the pressure. The only objection —at least the one objection which occurs to me from what little I have seen, and what we hear, —is the matter of fluids passing through the tube into the trachea and into the respiratory passages while attempting to feed the patient. That is an annoyance and probably a detriment. It also, I suppose, will deter children from trying to take fluids. Little children soon learn to avoid things that hurt them, and I should think that it

would be a factor in preventing the free feeding of children. Now it may be that the introduction of fluid into the air-passages may not be harmful, for as recently as to-day I saw in some report from New York the recommendation that in case of tracheotomy, where there is obstruction below the tube, to pour fluid, by the teaspoonful, for instance, into the into the tracheotomy tube, letting it run down into the air-passages for the object of liquefying and softening the membrane, and getting rid of it in that way. That I think, is recommended by DR. GEO. F. SHRADY, who had practiced it recently with apparent benefit.

The question of introduction of fluid into the air-passage may not be a tangible objection. But we would, perhaps, prefer to select the kind of fluid we would put into the trachea instead of milk or beef-tea, or anything of that kind. The operation of tracheotomy has been resorted to for a great number of years, with varying success, by different operators and in different localities. TROUSSEAU years ago, reported his success as about one in three, or three to four, from a very large number of cases. In the cases we have heard this evening as compared one with the other, tracheotomy hardly holds its own. The number of cases in tracheotomy no doubt are not all reported, but a fair proportion of them probably having been reported. While tracheotomy is certainly of great benefit, and has proved itself to be such in this class of diseases, it is subject to its disadvantages and annoyances; but so also has intubation its annoyances both to the patient, the friends and the doctor.

DR. C. T. PARKES: I have nothing but words of commendation as far as DR. WAXHAM is concerned, for his persistence in presenting this method of O'DWYER to the profession of this city. I have nothing to say about intubation; I have no experience, never having seen a tube used. I have had a little experience in tracheotomy, and so far as my personal experience goes, I shall stick to that until I have reason to change it. My experience extends to over thirty-one cases of tracheotomy. I had the honor to report to this society on previous occasions the first fifteen cases; eight recovered and seven died. I have collected the names and residences of sixteen more, and of these ten have recovered and six died. That is a pretty fair showing. I cannot explain, do not pretend to explain this percentage of recoveries. You will find in the literature of tracheotomy throughout the world that some operators have a good fortune in that respect. I do not think it an unusual or peculiar fact that the doctor relates about relief given to the patient when you open the trachea after stenosis; cases in which the patients are unconscious, black in the face, and are revived by the introduction of the laryngeal tube, such a result is to be expected. I see by the report very few if any of these cases recover after intubation; I know I have seen just such cases recover after tracheotomy. I have never had any trouble from the swallowing of fluids or food of any kind; I have seen the fluids come out of the opening of the tube, and have had the physician in charge reporting that we had unfortunately made an opening into the œsophagus; those cases have never given trouble, and in a few days subsided. There is one peculiarity about these cases of intubation, that DR. BOGUE has explained, the pressure of the tube causing an early disapperance of the membrane. There have been no cases that I have seen in tracheotomy, where the tube could be removed under six days; in two cases it was three or four months before the tube was removed; I have never seen the trachea opened so far, without seeing false membrane come out of the trachea. If I were enabled to remove the tracheotomy tube inside of six days or a week, I should think that to be a case in which no membrane was found in the trachea and one, in all probability, if I had waited a few days, in which the patient would have gotten well without any operation. There is something peculiar and interesting in the ages of those sixteen cases, the youngest being 3½, the oldest 37 years of age. I think the cases in which stenosis has been complete, and required an opening of the trachea, have been very few in the adult. One of these operations was upon a woman after she had been sick some four or five days with a bad case of pharyngeal diphtheria. At the time I saw her she was absolutely suffocating, and I was called for the purpose of performing tracheotomy; I did the operation under very poor surroundings, and yet the patient recovered. The tracheal opening became diphtheritic.

Another case was 32 years old. The patient died on the table; this accident has happened in quite a number of cases. I never had any trouble with the children and certainly expected less with the adults, as in the latter the operation is much more simple than in the child. The patient stopped breathing before the trachea was reached, and after it was opened it was impossible to restore respiration. As far as I am concerned, I can say nothing about intubation; I think it is very likely I shall purchase a tube. I don't know whether or not it is such an easy thing to intube the larynx; I think I think I have cognizance of three cases not in the doctor's list that proved fatal, in which some difficulty was met. One 3-year old died the day after. One 7, in which no relief was given, as the membrane seemed to be pushed ahead of the tubes, and one in which no relief being given, the attempts to remove was complicated by the child swallowing it and being buried with the tube in its stomach. Another,

a young lady 17 years old. This patient recovered; she was relieved immediately after the introduction of the tube, and rested very comfortably until the next day when she complained of a pain in her stomach. In the evening of that day she passed the tube from the rectum. I allow you to judge of the necessities requiring its use, so I don't know that I can agree with these gentlemen and say the operation is simple. We know what tracheotomy amounts to, and I am sure I would not feel right about it, I should be haunted with the idea of not doing my whole duty, if I left a child 7 years old go without doing tracheotomy where I felt satisfied, after this tube was introduced there was no relief given. I think tracheotomy will always have a place. I have been asked so many times how I come to have this record of tracheotomy, that I think it is due me to say one thing more; I do not know how to explain it. I believe no other operation for tracheotomy should be done but the high operation. The trachea should be opened at the highest ring, and if necessary, divide part of the cricoid, as I have done, or all of it. Certainly the after care has a great deal to do with the recovery, and I do not believe there are any persons so wanting in intelligence, but if you give them instructions carefully they will carry them out. So far as my experience goes, the surroundings have made no difference, even if it be a house of only one room with the whole family living in it, and several other animals besides. I think the room should be kept at a temperature above 80; there should be no attempt to fill it with moisture; the room should be so hot as to be decidedly uncomfortable for all the friends, for the first twenty-four hours. During this time (twenty-four hours), the inner tube of the trachea should be removed every hour whether the patient seems to need it or not, because that is the time when the deep-seated trouble in the organs below starts. After that time I do not believe the tube should be removed oftener than seems absolutely necessary, and I do not believe that mucus can be prevented from drying by the introduction of foreign bodies. Every time the tube is removed it should be reintroduced damp, or wet in a mild solution of soda, and occasionally without taking out the inner tube, drop into the trachea a few drops of this same fluid so as to keep the end of the tube is as moist as possible. No foreign bodies of any kind should be introduced into trachea after you are quite certain all the pieces of membrane had been detached and removed at the time of the operation. The introduction of such an innocent little thing as a feather or sponge, I am satisfied does more harm than good. I am willing to admit that in one case which showed every sign of recovery, the tube was moist and the cough was moist, and I had every reason to believe it would get well, but owing to over-anxiety I kept poking feathers into the trachea and had the friends do the same, until I got up an inflammation of the trachea proper around the tube, which I am satisfied was the cause of the fatal issue. I do not think there should be any interference; the least possible interference is the best plan of cure.

DR. H. T. BYFORD said: I wish to call attention to one fact; that is, in the statistics of hospital tracheotomy shows about as favorable as intubation, although in private cases the safety, simplicity, and absence of formidableness of intubation makes it already the popular operation. As I have said before this, tracheotomy is an operation for hospital practice, where the difficulties can be overcome, and where its just claims for precedence in particular cases must always obtain consideration.

DR. F. E. WAXHAM, in closing the discussion, said: I believe every tracheotomist will entertain an opinion in regard to tracheotomy according to the success which he has attained. If a physician has saved every patient upon whom he has operated, he will feel that the operation is good enough, and will be perfectly satisfied; if he has saved a large proportion of his cases he will be loth to accept anything new; but the great majority of physicians, who have either met with unvarying failure or inferior success, will have a poor opinion of the operation. English writers seem to be losing faith in tracheotomy, for HOLMES, in his "System of Surgery," says: "English medical men seem very generally to incline to the opinion that the operation, if not to be recommended, is at least justifiable, but to be successful it must be performed at a very early period of the attack." Referring to PROFESSOR PARKES' remarkable record of tracheotomy, I can not help feeling that his cases could not have been so unfavorable. I cannot believe that he had many young infants to operate upon. I would like to ask the age of his youngest patient?

DR. PARKES: Three and a half years.

DR. WAXHAM: That explains why his record has been far more successful than that of many physicians. I believe that if tracheotomy were performed upon every case without reference to age, condition, or type of disease, we would not save more than one out of every 10 or 12. Many physicians select their cases; indeed, I know of some who will not operate upon a child under three years, and of others who will not operate upon diphtheritic cases on account of the known fatality occurring after tracheotomy in these cases.

In regard to the difficulty of performing intubation, I would say, that any of you who attempt the operation upon a child without practice upon the cadaver, will certainly be sorry for it. I have known of four physicians

who have failed completely. In regard to the patient to whom the last speaker referred, the young lady with the tube in her stomach, that case I am afraid was not in my record. I, unfortunately, or perhaps fortunately, did not secure the patient.

DR. PARKES has stated that after tracheotomy, if he were able to remove the tube in less than six days he would have concluded that there could have been no membrane within the larynx, and that if he had waited a few days longer the patients would have recovered without the operation! May I be pardoned for feeling that the natural inference would be, that in these cases of intubation because the tube has frequently been removed on the third, fourth, or sixth day, that there could have been no membrane present and the operation was unnecessary? In reply, I would state that in every case coming under my observation false membrane has been expelled when the tube was introduced. The reason why the laryngeal tube can be removed earlier than the tracheotomy tube is, that more or less membrane is detached when the tube is first introduced, and second, the pressure of the tube and the frequent coughing assists in dislodging the membrane; while after tracheotomy little or no air passes through the larynx until the removal of the tube, and there is nothing to cause the dislodgment of the membrane.

In regard to feeding the patient, many of my patients have taken abundance of nourishment without difficulty. Occasionally, however, there will be one that will not take a sufficient amount. It will depend a great deal upon the size of the tube. If we use a tube larger than is appropriate for the age of the patient, it will not always fit perfectly into the cavity of the larynx, and consequently the epiglottis will not close accurately over it. In a case such as DR. STRONG has referred to, where the membrane is pushed down ahead of the tube, the trachea forceps would be very useful in removing it.

There are a great many dangers from tracheotomy that are never met with from intubation; but we rarely hear of them. I have learned of one physician who attempted a tracheotomy on a child four years old. Cutting down hastily he severed large blood-vessels, and losing his head at the sight of the copious hæmorrhage, at once sewed up the wound, while the child, almost with its last breath, wanted to know if they were going to cut him any more. Another physician, in cutting down hastily in order to open the trachea, missed it, and accidentally severed the carotid artery. Indeed, the history of tracheotomy is replete with horrors, but we do not hear of them. In the hands of experienced surgeons, who are cool and collected, the operation may be a simple and safe one; but in the hands of the inexperienced and the nervous, performed, as it frequently is, in the dead of night, it then becomes a formidable, yes, a dangerous procedure. Intubation, on the other hand, can be performed quickly, in a very few seconds, and without the dangers attendant upon tracheotomy.

GASTRO-INTESTINAL HEMORRHAGE IN AN INFANT.

BY WALTER J. CREE, M. D., DETROIT, MICH.

On July 8th, I was called to attend Mrs. B. in her seventh confinement, all previous confinements being normal. At 5 p.m. she gave birth to a male child, well formed; weight, 8 pounds; time of labor, eight hours. At 10 p. m. mother and child apparently well.

July 9th.—At 9 a.m. I was hastily summoned to see the child, who was "bleeding from mouth and nose." I found there had been an abundant hemorrhage from the stomach. Child was pale, respirations difficult, pulse feeble, extremities cold.

At 10 o'clock another hemorrhage occurred. At 2 p.m. a hemorrhage from the bowels took place, the blood being of a bright color, as was that from the stomach. At 8 o'clock another hemorrhage from the bowels, the blood being darker and more or less coagulated. The child was very much emaciated, could not nurse, and slept almost continuously.

July 10th.—Bowels moved at 9 a.m.; blood and meconium mixed. Child began to nurse a little, had a better color and more warmth.

July 11th.—Bowels moved twice, showing a small amount of blood of a dark color and a very disagreeable odor. Child nurses and seems better in all respects.

July 12th.—Discharges from the bowels natural.

Treatment.—Cold compresses to abdomen, warmth to extremities, and child kept in a moderately cool room. Small doses of plumbi acetas every two hours, and a few drops of brandy in sweetened water occasionally when the child was unable to nurse.

The amount of blood lost was, probably, one half pint or more.

The case has been interesting to me—the first of the kind I have seen. According to SMITH and TANNER, such cases are infrequent, about one half dying, and those recovering being generally weak and subject to rachitis, diarrhœa and convulsions.

I shall watch this case as long as opportunity offers, and note the result. At the present time the child is in good condition.

In a recent confinement the umbilical cord was 42 inches long and very slender; placenta large.

FOREIGN SUBSTANCE IN THE UTERUS.

BY W. E. HUGHES, M.D., PORTAGE, OHIO.

Some months ago I was called some distance away to see MRS. M., and meet there her family physician.

History of case as follows: She had failed to menstruate for some weeks, attributing her failure to taking cold. Was advised by a female friend near by to "open the womb," which she proceeded to do with a hair-pin. By some mischance she let it go, and it slipped into the uterus. Failing to remove it, she became greatly alarmed and sent for her family physician, who, after much trying also failed to bring it down, and sent for me to try. I introduced a speculum and with a sound succeeded in bringing down one branch of the pin, grasped it with long slender forceps and with the sound disengaged the other end. A few drops of blood followed. She of course felt very much relieved. What followed is the peculiar part of the story. Happening to be in the neighborhood about five months after, I was told that she had been safely delivered of a fine boy a few days before.

Considering that the three-inch hair-pin had been in the uterus for thirty hours, and that first and last the uterus had been somewhat roughly handled, it is reasonable to suppose that the baby had a very narrow escape.

Correspondence.

CYSTIC DEGENERATION AND ENLARGEMENT OF SPLEEN.

On May 8, 1886, MRS. J. L. died suddenly of an enormously distended abdomen from a large abdominal tumor.

Postmortem showed that all of the abdominal organs were healthy except the pancreas, which was involved in a sarcomatous and cystic degeneration, and weighed at least 50 pounds of solid matter.

The contents of the largest cyst was a large quantity of pancreatic secretion. Many strong adhesions were found, particularly to the spine and the intestines.

More than nine years since, in Indiana, the patient had what the physician called typhoid fever. Following this she had malarial fever, and soon after a fullness in the left side shewed itself, which was supposed to be an enlargement of the spleen.

She had been sent to numerous hospitals, and consulted THOMAS and EMMET, of New York, KIMBALL, of Lowell, and several surgeons in Boston and elsewhere. She was operated on twice by HOMANS with small result. No one suggested or suspected the true location of the disease. All seemed to fully believe that the spleen was undoubtedly very much enlarged. Every surgeon refused to attempt its removal, feeling that such an attempt would kill the patient.

It is very remarkable that the pancreas should become so degeneratively enlarged as to distend the entire abdomen so tightly as to compress the stomach, heart and lungs more than at a full term pregnancy, and not disturb her stomach any more than it did, for she had a ravenous appetite to the last of her life, for chops, beef, etc.

She became very much emaciated and her lower limbs bloated and became nearly helpless. The bowels continued to act very well to the last. So did also the kidneys. She occasionally vomited.

The immediate cause of death was a fainting in her easy chair. She had had several of these fainting spells during the last six months of her life. She was 47 years old, and the mother of several children.

N. S. FOLSOM, M. D.

Portsmouth, New Hampshire, June, 1886.

THE NEW SKIN DISEASE.

I have read with interest the recent articles on the "New Skin Disease." I cannot see the difference, by closely regarding the symptoms, from our "itch," as we call it, here in the east. I have frequently been called to treat such disease, and this past year of my practice has been no exception. My remedy is:

Lac. sul., ʒ ii.
Simple cerate, ʒ iv.
M.
Sig.—Apply at night.

Wash with strong solution of soft soap next morning, changing everything with which the body surface may come in contact. This will, of course, include sheets, pillows, cases, etc. Repeat this for three successive nights, with the same regard to cleanliness each time. I have not failed in a single case during a practice of thirty years.

The AGE is becoming more popular here although so distant from its seat of publication; it is so practical, just the thing for an every-day physician.

E. F. WILMOT, M. D.

GREAT BEND, PA.

"Describe the mulberry calculus," said an examiner in surgery to a candidate for a degree. "Sir!" replied the young man, "I came here to be examined in surgery, and not in botany."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JULY 26, 1886.

Editorial.

SKEPTICISM IN THERAPEUTICS.

A correspondent of the British Medical Journal graphically pictures the career of the skeptic in therapeutics.

The lesson conveyed is so obvious, and at the same time so important, that we reproduce below the humorous though faithful description of the skeptic, (whom our readers must have met with), to impress the folly of unfaith in drugs, born of ignorance of their action.

There is a wise skepticism in therapeutics which is in reality true conservatism, which carefully tests the value of drugs before lauding or condemning them; which doubts the *raison d'être* of secret formulæ and justly ridicules the credulousness of those who prescribe or take them on faith.

The wise skeptic is, however, not a foe to progress in the therapeutic art since his doubts are dissipated by clinical evidence, which is the touch-stone that reveals to him the worth or worthlessness of drugs.

The present time seems to us a transition period in therapeutics. Old and preconceived notions of the action of drugs have been disturbed, and the tendency of the student or young practitioner, who hears the gospel of hygiene, dietetics, and preventive medicine preached, is, to underestimate the control exerted over disease by remedial agents.

The importance of good hygiene can not be too strongly advocated, but the physician must not forget that his services are most often sought when it is too late to remove causes, it is the effects already produced that demand his greatest skill, and it is here that the profound knowledge of drugs and their action stands him in good stead, while the skeptic could, if sincere, but impotently watch to the fatal end the ravages of disease amenable to treatment. But we will let our English friend tell his own story, which is as follows:

"The great opponent to all progress in therapeutics is the skeptic. He never loses an opportunity of stating that he does not believe in therapeutics, 'if there be such a thing.' He publishes a book on medicine, and ostentatiously leaves out all reference to treatment. He declares openly that he does not know of any disease or morbid condition that can be influenced in the slightest degree by drugs. He does not credit any statements as to the good effect of iron in anæmia, and scoffs at the idea of mercury being of the slightest practical value in the treatment of syphilis. He has a deeply-rooted antipathy to phosphorus and arsenic, and consideres anyone who prescribes them a knave or a fool. In lecturing on the uses of such a drug as digitalis, he tells his audience that the dose of the infusion is from a teaspoonful to a bucketful; 'it is all the same.' When called upon to treat a case of poisoning, he advocates 'expectant treatment,' and is decidedly adverse to antidotes, on principle. The skeptic is not, as a rule, well read; he is apt to think that every drug with which he is not familiar—and they are many—must needs be 'an American quack remedy." The term 'pharmacology' is not familiar to him, but he thinks it 'has something to do with dispensing.' By a curious coincidence, he is to be found on all hospital committees, and takes the greatest interest in the appointment of lecturers on materia medica, preferring the candidate who knows the least about it, on the ground that he will have no preconceived ideas. The skeptic probably commenced life as a pathologist, but, after a variable period of time, has lost faith even in that. Having thrown his medical studies aside, he devotes his energy and attention to recondite works on philosophy. He gradually develops a disbelief in any future, and is doubtful about the past. At his necropsy, in which he, possibly, regrets being incapacitated from taking a part, a gumma is found in his brain, for which, years before, he had declined to be treated. Such are the men and the minds which so persistently oppose all progress in therapeutics. Unfortunately, their influence, pending the fatal termination, is often extremely prejudicial to any advance, and acts as a damper to the more enterprising and restless spirits, who, imbued with the enthusiasm of their calling, seek to obviate the present imperfections in our means of diagnosis and treatment, and have the courage of their opinions. The most disastrous effect is thus produced on the minds of students, who are only too glad of an excuse to avoid the arid and difficult manipulations, and study, necessary to an intelligent comprehension of the facts at issue.

ANALYSIS OF FIVE HUNDRED DEATHS IN A LIFE INSURANCE COMPANY.

Dr. Henry F. Lyster, medical director of the Michigan Mutual Life Insurance Company, of this city, has prepared the following analysis of deaths occurring in this company during the

first eighteen years of its existence. It affords some very interesting matter, and will be of especial interest to such of our readers as are examiners for insurance companies. The analysis was submitted at the late regular meeting of the State Board of Health, of which DR. LYSTER is a member:

NAMES AND CLASSIFICATION OF DISEASES.		Number of Deaths.	Average Age.	Average Duration of Policy in Years.	Average Height in Feet and Inches.	Average Weight in Pounds.	Average Expansion of Chest in Inches.
Nervous System	Apoplexia	39	51.10	5.5	5— 8 5	163.7	3.25
	Congestio cerebri	6	40.66	2.	5— 8.70	150.5	3.87
	Degeneratio cerebri	9	50.10	6.66	5— 7.25	155.	3.33
	Dipsomania	2	49.50	8.50	5— 8.	155.	3.00
	Fulminis ictus	1	51.	2.	5—10.	170.	3.00
	Inflammatio cerebri	10	50.	8.4	5— 7.9	163.	3.30
	Insolatio	1	50 52	0	6— 1.	170.	4.00
	Tetanus	2	43.50	4.	5—10.	140.	3.25
	Total	70					
Respiratory System	Peripneumonia	62	43.45	3.64	5— 9.02	142.24	3.55
	Phthisis pulmonalis	98	40.17	4.23	5—11.06	139.45	2.93
	Pleuritis	1	38.	5.	5—10.	160.	4.25
	Tubercula miliaria acuta	16	38 35	4.76	5—11.83	147.92	2.03
	Total	177					
Circulatory System	Aneurisma	3	41 33	4.66	5— 7.83	126.66	3.00
	Angina pectoris	1	60.	8.	6	180.	4 00
	Morbi cordis	23	53 60	6.	5— 7 64	174.45	3.12
	Pericarditis rheumatismus	6	37 80	2 9	5— 7.8	151.6	3.80
	Total	33					
Digestive System	Diarrhœa, chronica	2	31.50	3.50	5— 6.	129.	3.25
	Dysenteria	3	46.33	2.	5— 9.66	163.33	3.33
	Gastroenteritis	3	54.	3.66	5—10.16	168.33	2.83
	Hepatitis	5	35.50	8.	5— 6.60	136.40	2.90
	Inflammatio ventriculi	8	43.	2.75	5— 8.87	162.12	3.34
	Morbi intestinorum	2					
	Morbi jecinoris	7	46.57	2.57	5— 9 64	150.	3.14
	Morbi ventriculi	2	35.5	4.	5— 9 75	137.50	2.75
	Peritonitis	12	40.5	4.08	5— 9.33	175.66	3.14
	Total	44					
Urinary System	Cystitis	6	54	6.16	5— 9.50	192.	2.95
	Morbi Brightii longus	16	54.5	7.85	5— 8.14	166.35	3.32
	Total	22					
General Diseases	Accidenti	34	40.7	3.80	5— 7.	148.42	2.75
	Carcinoma	32	48.90	4.76	5— 7.3	160.38	3.02
	Erysipelas	3	56.33	8.	5— 7.	157.50	4.00
	Febris cerebro-spinalis	8	37.12	2 75	5— 7.81	151.25	3.21
	Febris typhoides	47	38.54	2.93	5— 7 79	156.65	3.16
	Febris puerperarum	2	24.	1.	5— 3.25	132.25	2.00
	Gangrena senilis	1	62.	11.	6— 1	185.	3.50
	Gelatus	1	50.	2.	5— 9.50	155.	4.00
	Diabetes mellitus	1	41.	11.	5— 8.	145.	2.00
	Diphtheria	2	41.	2.	5—10.	170.	4.00
	Rheumatismus acutus	2	57.	4.	5— 7.25	142.52	2.75
	Periostitis femoris	1	43.	1.	5— 9.	140.	4.00
	Rigor	5	53.	2 60	5—10.7	154.	3.20
	Inflammatio suppurans	3	45.	1.33	5— 9.50	148.	3.50
	Asthenia	7	46 85	4.14	5— 9.33	175.66	3.14
	Senectus	1	79.	10.	5— 7.	192.50	3.00
	Suicidum	11	39 27	2.36	5— 8.36	154.45	3.50
	Variola	3	34.36	2 66	5— 7.33	150.	3.00
	Total	154					
	Total all cases	500					

AN OLD FRIEND UNDER NEW PROTECTION.

It is a well-known fact that many of the proprietary medicines which have had an extensive sale at a high price are virtually reproductions of some well-known officinal formulæ or some fortuitous combination of remedies suggested in text-books or medical journals already well known to the medical profession.

Such a fact furnishes a strong practical argument against the protection of formulæ and through such protection the consumer is compelled to pay a price out of all proportion tc the value of the drugs and the legitimate profit of the pharmacist.

Any tendency, therefore, however slight, of

physicians or pharmacists to seek to establish any degree of proprietorship in formulæ which are the common property of the medical profession, can not be too strongly deprecated.

A circular before us, issued by Messrs. W. H. Schieffelin & Co., seems to us to be designed to create the impression that the profession are indebted to these pharmacists for a very old and useful formula which we first remember to have seen recommended some time ago by DR. WM. GOODELL, of Philadelphia, in a clinical lecture published in the MEDICAL AGE.

The circular in question contains also a letter from DR. S. A. DEFOE taken from the St. Louis Brief, in which the DR. announces his discovery of this formula as a specific for melancholia.

The formula we allude to is the triple valerianate pill containing one grain each of the valerianates of zinc, quinine and iron, a very excellent combination as the experience of many old practitioners will testify.

It seems, however, superfluous to announce it with all the flourish and *éclat* of a new discovery in therapeutics.

We should not be much surprised to see some of our pharmaceutical friends, in their thirst for glory, announcing, in all seriousness, to physicians, on the authority of some recently fledged votary of our noble art, that quinine pills *as made by them* have been discovered to be of service in treating malarial fever. One is forcibly reminded of the antiquarian researches of the immortal PICKWICK which led to the discovery of the mystic symbols, which being deciphered read Bill Stumps, his mark.

THE POSSIBILITY OF CROTON OIL ABSORPTION.

The profession of this city have been somewhat agitated during the past week in connection with a case of eruptive disease, touching the diagnosis of which there has been some considerable difference of opinion. The attention of the attending physician was aroused by the appearance of an eruption, disseminated generally over the body, in the case of a young woman who had been complaining of headache and lumbar pains. The history of the case reveals the fact that the patient had made an external application of croton oil some days previously, and that the lumbar pains were synchronous with her catamenia. The diffuseness of the eruption, extending to the palms of the hands and the soles of the feet, and the fact that two sporadic cases of small-pox had been reported, induced this physician to call in the Health Officer to assist in the diagnosis. That official after a careful examination and a delay of a day or two, pronounced the disease varioloid, and accordingly placarded the house. A number of physicians, who subsequently saw the case, declare that this diagnosis was erroneous, and a number of others maintain it to be correct. Errors are, of course, prone to occur among mortals, and even health officers are not infallible. The chief point of scientific interest in connection with the case, lies in the possibility of such a diffuse eruption, from a single application to the chest of a croton-oil liniment. Any practitioner of experience will bear testimony to the not infrequent spread of the eruption to remote parts from the original site of application. This spread is, however, usually supposed to be due to the accidental contact with other parts, of the application employed, and the possibility of its being traceable to absorption is not usually entertained.

In the case in question, the eruption is too general to permit of the belief that it is due to contact, and if it has been caused by croton oil, it must have been through absorption and cutaneous elimination. The literature of the subject is scant, and, indeed, as far as we have been able to discover, furnishes little warrant for the supposition that a secondary eruption may occur through absorption. The fact, however, that catharsis may be caused by application to the surface, proves the possibility of absorption, and unless the eruption in the case in dispute is distinctly variolous, as to shape and the other pathognomonic features, we should be disposed to admit the possibility, and, indeed, with the history of the case before us, the probability, of the causative relation between the application of the croton oil and the diffuse exanthem.

LEWIN, on The Untoward Effects of Drugs (edition 1883, translated by J. J. MULHERON, M. D.) has the following on the action of croton oil, which may be interesting in the above connection: As a derivative, applied externally to the skin there occurs after one or two applications, an erythema accompanied by itching and pain and slight fever, and upon this there appear, sometimes discrete and sometimes confluent, hard vesicles with serous contents, which in a day or two become purulent—and then burst, or there appear at once a large number of maturated pustules upon which crusts form in twenty-four hours. There not unfrequently occur, secondarily, particularly on the scrotum, according to WIBMER, herpetic eruptions, due, perhaps, to accidental contact of the oil, but perhaps also to its positive absorption.

The St. Louis Medical and Surgical Journal felicitates itself on the fact that its editorial staff can wrestle successfully with French, German, Italian, Spanish, Norse, Dutch and Russian. Most of us find it difficult to be scientific and truthful in one tongue.

Notes.

Queer patients in Vienna. A tailor of that city consulted a physician as to a disease from which he was suffering. The physician, after a careful diagnosis, gave a very unfavorable prognosis, declaring recovery from the affection impossible. The information was not kindly received, and the tailor, drawing a couple of revolvers, proceeded to empty their contents, first into the doctor and then into his unfortunate self. The doctor received two of the bullets, and the other seven of the nine discharged found a lodgment in the patient. Fortunately, the two were productive of no fatal effect, and, not less fortunately, the effect of the seven was to anticipate the end predicted of the disease. The country practitioner is, not infrequently, compelled to take various kinds of produce in lieu of coin, but this latest method of repaying a doctor with lead is unique. Let us trust that it will never become prevalent in this country. We have enough to contend against without having fees of this kind forced on us.

Professor M. Charteris, of Glasgow, advocates the continued employment of Latin as the language of prescription. He holds that "it is the masonic badge of our profession, and he who is ignorant of it and its grammatical construction is an interloper in the practice of medicine, although he may be dubbed M. D. by a university, or receive the licence of a physician and surgeon by conjoint corporation." This may all be true, and yet the man with the belly-ache cares more for the stuffs the prescription calls for, than for the genitive-endings of the names thereof. But, if it makes a man a better doctor to know the Latin (and perhaps it does), let us have Latin, *ad libitum, ad infinitum, et ad nauseam, pro re nata, et quantum sufficit.*

A gentleman received a note from his lawyer which he was unable to decipher. On his way to his office he met a friend at the door of a drug store. The friend, after vainly attempting to read the note, suggested that they step inside and hand it to the druggist, without comment. The druggist, after studying it in silence for a few minutes, stepped behind his prescription case, and in a short time returned with a bottle of medicine, duly labeled and bearing directions. When the gentleman saw his lawyer, he was informed that the note was a notice for him to call at his office between 3 and 4 p. m. of the following day. It is a pretty difficult matter to "stick" the regulation druggist.

The annual hegira for the old world has set in, and already a number of our medical friends have set their faces towards the east. Dr. Wile, of the N. E. Medical Monthly, is among them. He hopes "to gather much valuable information and much food for thought," in his rambles up and down through the effete monarchies. We trust his most sanguine hopes may be realized, and we are convinced the benefits will not be one-sided. The influence of live Yankees abroad is always salutary, and if there is a more lively Yankee than our brother from the nutmeg State, it has not been our fortune to run across him.

The Medical and Surgical Reporter commits itself to the opinion that a male is preferable to a female, as a doctor's door keeper, but concedes an exception in the case of gynæcologists, whose door-keepers should always be females. It thinks it is more decorous for a male to open a door than for a female to perform this important office. This is the only reason for its preference. This reason does not rise to the requirements of the occasion. Our contemporary should furnish some reason more in keeping with the scientific bearing of this important function. Here is a rare chance for it to express itself.

Are you in the habit of employing arsenic, *generally*, in the treatment of skin diseases? In what diseases of the skin have you found arsenic of superior value to other remedies? What ill effects, if any, have you observed from its use? What preparations of the drug do you prefer, and in what doses do you employ it? These are questions which the editor of the Journal of Cutaneous and Venereal Diseases, 66 W. 40th street, New York, would like our readers to answer in communications addressed directly to him.

One of the most pathetic things of the day is the faith which prompts a bald-headed man to buy a bottle of hair-restorative from a bald-headed barber. It is second in pathos only to the medical editor who, while he is persistently shedding his capillary locks, publishes columns of formulary for the sure relief of alopecia. Show us a medical journal given to the publication of such formulary, and we will show you one whose editor is growing bald early but not gracefully.

A hypercritical medical man found fault with Mary Anderson because of her assuming the stiffness of a corpse immediately on being killed, in one of her plays, holding that cadaveric rigidity does not set in until five or six hours after death. The fair actress naively inquired whether it would not be a very severe strain on the patience of the audience, to oblige it to wait for six hours until she became stiff after the fashion of nature.

Medical Record: DR. LESENNE, of Amiens, says that one can determine with certainty whether a person is dead or not, by thrusting a pin into the skin. In a cadaver the hole made by the pin will remain patent, just as if the pin had been stuck into a piece of leather, but if the person be alive the hole will immediately close, leaving scarcely a sign to show where the pin had entered the skin.

Technics: A white-coated tongue indicates febrile disturbance. A brown, moist tongue, indicates disordered digestion or over-loaded primæ viæ. A brown, dry tongue indicates depressed vitality, as in typhoid conditions and blood-poisoning. A red, dry tongue indicates pyrexia, or any inflammatory fever. A "strawberry" tongue, with prominent papillæ, indicates scarlet fever or rötheln.

Out of all of New York's illustrious medical luminaries, only one, DR. WILLIAM A. HAMMOND, was honored with the appearance of his portrait and biography, in the St. Louis papers, during the late meeting of the American Medical Association. How was this thus? Why, even Detroit was more highly honored than this. This thing of kicking against the Code is bound to bring humiliation to the kickers.

A Scotch patient, on his visit to the doctor's office, appropriated a time-piece. On his trial for the offense he sought to justify his larceny by quoting the proverb: "Time and the doctor cure all diseases." As the doctor had not given entire satisfaction, he had taken his time.

HERR PAUL VON RITTER has left to the University of Jena, $75,000, the interest of which is to be devoted to the promotion of phylogenetic zoölogy, according to DARWIN'S theory, of which PROF. HÆCKEL, of the above University, is an able exponent.

The Weekly Medical Review suggests that M. D., on a doctor's card, might stand for Money Down. This is excruciatingly funny. We used to laugh at the joke ourselves, away back in the sixties.

The Evening News, of this city, reports the fatal result of an operation on a patient in a home institution. The operation, it says, was performed by "the greatest surgeon in the northwest." Who is he?

Three cases of small-pox have appeared in Detroit during the past two weeks. The source of the contagion has not been satisfactoriiy traced, although it is supposed to have been brought in by an immigrant.

Energy and enterprise climb the steep stairs to the pinnacle of success, while luck goes up in an elevator.

Book Notices.

A SYSTEM OF PRACTICAL MEDICINE. By American Authors. Edited by William Pepper, M. D., LL. D., Provost and Professor of the Theory and Practice of Medicine and of Clinical Medicine, in the University of Peensylvania, assisted by Louis Starr, M. D., Clinical Professor of Diseases of Children, in the Hospital of the University of Pennsylvania. Volume V. Diseases of the Nervous System.
Philadelphia: Lea Brothers & Co.

This is the concluding volume of the greatest distinctively American work on the practice of medicine, and, indeed, the superlative adjective would not be inappropriate were even the productions of all other countries placed in comparison. An examination of the five volumes is sufficient to convince one of the magnitude of the enterprise, and of the success which has attended its fulfillment. Work on it was begun five years ago, and the first volume appeared four years later. Of those who were engaged in the system, FLINT, VAN BUREN, ARMOR, BEMISS and ELSBERG have gone the way of all flesh; but their works do live after them, and in no place do they shine more resplendently forth than in the System before us.

The number of articles in the System is 185, written by 99 authors, and covering 5,600 pages. These articles are characterized throughout by their practical nature, and are thus especially adapted to the needs of the profession.

This concluding volume is devoted exclusively to the diseases of the nervous system, and its forty-four chapters are from the pens of men who are generally recognized for their fitness as exponents of this division of medicine, on this continent. It is illustrated with fifty-eight cuts, the majority of which are original, and all of which are executed in the highest style of the engraver's art. In the case of a volume of this magnitude, and its variety of subjects, it is clearly impossible for us to particularize in regard to its merits. It must suffice to say that it is a fitting conclusion to a work of unequaled merit.

MANUAL OF SURGERY. A Treatise by Various Authors. In Three Volumes. Edited by Frederick Treves, F. R. C. S., Surgeon to, and Lecturer on Anatomy at, the London Hospital; Hunterian Professor at the Royal College of Surgeons of England.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

This work comprises three 12mo. volumes, averaging 600 pages each, and devoted, respectively, to General Surgical Affections, the Blood-vessels, the Nerves, the Skin; The Or-

gans of Locomotion and of Special Sense, the Respiratory Passages, the Head, the Spine; and, the Thorax, the Organs of Digestion, the Genito-Urinary Organs. It aims not to be an exhaustive treatise on surgery, but to present to the student and practitioner a concise account of the leading facts and principles of modern surgery. Both practitioner and student who have laid the proper foundation in more exhaustive works will find in this an excellent hand-book with which to jog their memories, and to summon therefrom useful facts which lie slumbering there, as they are wont, when they are required to be alive and on deck to meet emergencies. The work is a compromise between the exhaustive treatise and the "vest-pocket" compend, and avoids the busy practitioner's objections to both.

A Manual of Practical Therapeutics, Considered with Reference to Articles of the Materia Medica. By Edward John Waring, C. L. E., M. D., Fellow of the Royal College of Physicians, London; Surgeon-Major (Retired) in Her Majesty's Indian Army. Edited by Dudley W. Buxton, M. D., B. S. Lond. M. R. C. S.; Assistand to the Professor of Medicine at the University College, London, etc. Fourth Edition.
Philadelphia: P. Blakiston, Son & Co.
Detroit: John Macfarlane.

The first edition of this standard work appeared 32 years ago. The book had achieved a wide reputation many years ago, and its plan was such as permitted of its extension to meet the demands of increasing knowledge of the subject which it was designed to embrace. With each edition the necessary additions and corrections to keep it abreast of the times were made, and in that which now appears we have the latest information covering the more important of the newer drugs. Its index is very full and makes the book especially valuable to the practitioner whose circumstances prevent him from collating desired information from the many books which abound. Waring's Therapeutics will continue to be the favorite which it long has been, and the profession will hail with delight this new and revised edition.

Surgical Diseases of Children. By Edmund Owen, M. B., F. R. C. S., Surgeon to the Hospital for Sick Children, Great Ormond Street, London. 12 mo. 585 pages, with four chromo-lithographic plates and 85 engravings. Cloth, $2.00.
Philadelphia: Lea Brothers & Co. 1886.

As a work devoted exclusively to surgical affections of children, this commands especial attention. The author shows familiarity with the conduct and actions of children suffering from affections which they have not words to describe, which makes his book invaluable to all who realize the necessity of an early diagnosis in this class of patients. In the developmental stage delays are peculiarly dangerous, and unquestionably many of the deformities which date from childhood might have been prevented had the deviation from the health standard been recognized at the early period which a familiarity with the little book before us would prepare the physician for. The book is unique and is of a kind which recommends itself to the consideration of the physician, whose practice is so largely taken up with the treatment of children.

A Treatise on the Diseases of the Nervous System. By William A. Hammond, M. D., Surgeon-General U. S. Army (Retired List); Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School and Hospital; Member of the American Neurological Association and of the New York Neurological Society, etc. With 112 illustrations. Eighth Edition, with Corrections and Additions.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

To say anything in commendation of a book which has been before the profession for 15 years and which has reached its eighth edition, would be clearly a work of supererogation. This latest edition the author has given a thorough revision, and besides making changes has added a section on "Certain Obscure Diseases of the Nervous System" The book is a classic, and is the one which comes first to mind in recalling the treatises on its subject.

Surgical Diseases of the Kidney. By Henry Morris, M. A., M. B., F. R. C. S., Surgeon to and Lecturer on Surgery at the Middlesex Hospital, London. 12 mo., 555 pages, with six chromo-lithographic plates and 40 engravings. Cloth, $2.25.
Philadelphia: Lea Brothers & Co. 1886.

Although of comparatively small dimensions, this little book very completely covers the field which it undertakes. The concise style of the author enables him to say a great deal in limited space, and he has left very little to be said on the subject of which he treats.

Formulary.

A COMPOUND TINCTURE OF CAPSICUM FOR LOCAL USE.

℞ Tincture of capsicum, 200 parts.
Ammonia water, 100 parts.
Essence of thyme.
Chloral hydrate, ää 10 parts.
Alcohol, 1000 parts.

M.

This combination is highly recommended as a local application in rheumatism and neuralgia.—*Bull. gén. de therap.; N. Y. Medical Journal.*

IN OBSTINATE ULCERATION.

Mr. Tait speaks highly of cantharides, employed both internally and externally, in obstinate ulceration.

Internally he gives:

℞ Tr. canthârid., ♏xij.
Potassii iodidi, ʒ ss.
Tr. cinchonæ co., ʒ i.
Aquæ, ʒ vij.
M.
Sig.—Two tablespoonfuls three times a day.

Externally:

℞ Tr. canthârid., ♏xij.
Acidi nitrici dil., ♏xx.
Tr. cinchon. co., ʒ xij.
Aqæ, ʒ i.
M.

FOR ECZEMA OF THE HAIRY SCALP.

℞ Acidi salicylici, gr. viij.
Spts. mindereri, gr. xxv.
Glycerini, ʒ xij.
M.

FOR SCABIES.

℞ Naphthol.
Chalk.
Sulphur. precip., ää gr. x.
Lard, ʒ xij.

—*Jour. Cutan. and Vener. Diseases.*

INFANTILE DYSPEPSIA.

The following is Dr. West's formula:

℞ Sodii bicarb., gr. xxiv.
Ext. taraxaci, gr. xl.
Tr. rhei, ʒ i.
Infus. calumbæ, ʒ xi.
Aq. carui, ʒ iv.
M.
Sig.—Two teaspoonfuls twice a day.

Medical Progress.

The Treatment of Sea-sickness.—In an article entitled "The Nature and Treatment of Sea-sickness" contributed to Gaillard's Medical Journal, Dr. J. Leonard Corning thus discusses the modern treatment of this intractable malady:

In former times it was customary to look upon the stomach as the seat of primary derangement in sea-sickness. Accordingly, we find that the older writers were wont to recommend capsicum, the bicarbonate, and other preparations of soda, bismuth, ginger, brandy, champagne, the juice of lemons, oranges and other fruits, the application of belts and broad bandages about the abdomen, and, in short, any expedient was deemed worthy of trial, which promised some effect upon gastric function. With the ever increasing knowledge of the reciprocal relations existing between the functions of the organs and the central nervous system, the short-sighted views of pathology, which had dominated the professional mind for so many generations gradually gave way, and in their place have come the more recent theories, which look to the cerebro-spinal axis as the true seat of the primary disturbance. In accordance with these changes of opinion, the treatment of sea-sickness has undergone the most complete metamorphosis, so that at the present day, most scientific physicians have totally repudiated the crude methods adopted by the practitioners of a generation or two ago.

Among the various systems of treatment which have made their appearance as the direct result of the recent revolution in physiological and pathological opinion, none evinces more careful thought and ingenuity than that of Dr. Chapman. I have already had occasion to take exception to some features of the pathological opinions entertained by this gentleman; but, while so doing, I am equally conscious of the great service which he has rendered to the cause of pathological therapeutics, especially as exemplified in his method of treating sea-sickness.

Briefly stated, Dr. Chapman's method of treatment consists in the application of ice along the spine, by means of appropriately constructed sacks of India-rubber, which are secured in place by buckles and straps. The object sought after by this mode of procedure, is the reduction of the reflex activity of the cord, and the consequent prevention of vomiting.

The principles of application and the construction of the spinal ice-bag are thus described by Dr. Chapman:

It is necessary, *first*, that the ice be kept in contact with each region of the spine, the upper portion of the ice being prevented from falling down as the melting proceeds; *secondly*, that the applications do not extend far on each side of the spinal cord, otherwise the patient will become cold; *thirdly*. that, having regard to the comfort of the patient, the mouth of the bag containing the ice be so effectually closed as to prevent the water from escaping as the ice melts; *fourthly*, that the mouth of the bag be as wide as the bag itself, in order that the bag may be easily and rapidly filled; and, *fifthly*, that, without any inconvenience to the patient, facility should be afforded for giving escape to the air which accumulates in each compartment of the bag as the ice melts.

After long consideration and many experiments, I have succeeded in perfecting a bag which supplies all the above requirements. It is made of India-rubber, and consists of several compartments—generally three. These compartments are separated from each other by intervening brass clamps applied externally, or by internal India-rubber septa of different lengths. In all cases the mouth of the bag is closed by a clamp, one side of which is so thin, when turned next the back, as to cause no inconvenience to the wearer of the bag, while the action of the clamp itself helps to keep the bag in its requisite oval shape. Loops are affixed to the outer side of the bag, by which it may be sustained and secured in its place.

In order to keep the bag in its position most securely, and at the same time to allow the patient to remain upright or to walk about, I pass an elastic band through the upper loops of the bag and then round the head. The bag is thus held close to the back of the neck. In some cases I pass a long tape through the lower loop, carry each half of this tape over the shoulders, cross one over the other in front of the chest, carry them backward around the waist in order to clasp the bag closely into the small of the back, and then, bringing them forward, tie them in front. The bag will thus be sustained chiefly by the shoulders instead of by the head. This method of securing the bag is, however, not essential; it may be sustained, in the case of men, by buttoning the waistcoat and coat tightly over it; and, in the case of women, by tightening their dress over it in like manner. Of course, when stays are worn, it is necessary to loosen them sufficiently to allow the bag to pass down between them and the back. * * *

And continuing, he says: Persons whose liability to sea-sickness is not extreme will, I believe, generally find that the malady may be wholly prevented by applying ice as directed, as soon as they find themselves becoming ill. In such cases the degree of cold requisite for stopping the sickness will most frequently be obtained if the bag be placed outside the shirt or chemise, and in some cases even outside the flannel vest, when such a garment is worn. I have satisfied myself, however, that in all cases it is much better to let the ice-bag come in direct contact with the skin. * * *

As an auxiliary remedy which has often been found useful, I recommend the drinking of iced water, or better, the swallowing of small lumps of ice. Assuming the proximate cause of the malady to be what I have affirmed it to be, it will be seen at once that ice brought in contact with the peripheral ends of the nerves of the stomach will act on the same principle as it does when applied to the spinal region; it acts as a sedative, and so far, at least, as the stomach is concerned, lessens the number of irritating impressions, which would otherwise be transmitted from that viscus to the spinal cord, the reflex action of which is thus also lessened.

A far more important, and, indeed, in some rare cases an indispensably necessary auxiliary remedy, is the assiduous application of warmth to the feet, and even to the surface of the body generally if it be cold. In all cases it is desirable that patients especially prone to become cold be kept warm by an abundance of woolen clothing. I have said that, as a general rule, the application of the ice-bag will cause the full re-establishment of the peripheral circulation, the diminution of which produces the fall of temperature, resulting in the distressing sensation of coldness experienced by persons who are sea-sick; but in some patients the contractile force expended on the arteries is usually great, while attraction of the textural elements for blood is very feeble. In such cases the action of the ice must be aided by a resort to such measures as may be necessary for keeping the patient comfortably warm. The feet and head need most especial attention, for the circulation in them is likely to be most injuriously reduced. Sometimes the feet only are very cold, in that case they should be well wrapped up, and, if needful, a "foot-warmer," or hot bottle should be applied to them. Sometimes the head, particularly the forehead, becomes deadly cold; when this happens care should be taken that while the ice-bag is well applied along the lower part of the neck and between the shoulders, the head is surrounded with a woolen cap or suitable wrapper of some kind, and speedy relief may often be given by the warm hand of a healthy person placed on the forehead of the sufferer.

These, in brief, are the main features of DR. CHAPMAN'S system of treatment—a method, which, when first promulgated produced no little stir in the medical world.

Of the remedies which may with advantage be employed in conjunction with the spinal ice-bag, it now remains to speak. They are such as tend to diminish the irritability of the central nervous system on the one hand, and such as tend to prevent the transmission of impressions through the stomach by causing anæsthesia of the gastric mucous membrane. In the first category belong the bromides; in the second, the preparations of erythroxylon (coca). To the fluid extract I sometimes add the hydrochlorate of cocaine when pronounced local effects are desired.

According to BEARD, DR. BARKER has prescribed moderate doses of the bromides during the attack; but the same author is authority for the statement that the late DR. F. D. LENTE was the first to suggest the employment of these remedies as a preventive of sea-sickness, by their administration before embarkation. The dose recommended by DR. LENTE was, I believe, thirty grains. Subsequently BEARD,* when discussing the applicability of the bromides in the treatment of sea-sickness, lays particular stress upon the fact that the dose is not so much a matter of consequence as the physiological effect—*bromization*. On this point I entirely agree with him, as well as in his statement that "for nearly all the members of the human race, above the age of twelve or fifteen, it is probably entirely safe to begin with thirty grains of bromide of sodium, and to increase and keep up the action of the remedy until there is a weakness of the limbs, a dullness, a stupor, a tendency to sleep by day and by night, and to fall asleep easily at any time, which indicate that the system is becoming bromized, that is, in a state where there is little likelihood of being sea-sick. In some cases a feeling of great weakness comes on before the disposition to sleep." This is the *multum in parvo* of the whole question of *bromization* in sea-sickness—a method of treatment which caused some little stir in the profession not many years since. Instead of giving the sodium salt alone, I have been constrained to try a solution consisting of equal parts of the bromide of potassium, lithium, sodium, and ammonium. I usually begin with twenty- or thirty-grain doses, and continue the administration of the salts until the characteristic physiological effects are obtained. It is clear that the central nervous system, when in the peculiar condition incident to bromization, must be more or less exempt from the influence of external impressions. Consequently, the pitching and rolling of the vessel fail to cause those perturbations in the domain of the brain and

*Op. cit., p. 31.

cord which, under ordinary circumstances, culminate in the characteristic phenomena of sea-sickness. Therefore, aside from the purely clinical phenomena of the affection, we have, in the prophylactic influence of the bromides, convincing corroborative evidence that the primary disturbances of the affection are, in truth, to be sought for in the central nervous system. It is clear, however, that, admitting this to be the real state of the case, impressions may be transmitted from the viscera, and more particularly from the stomach, which give rise to the central disturbance.

To my mind such a supposition offers ample explanation for the failures which sometimes attend the administration of the bromides, particularly when given in moderate doses. Guided by this line of reasoning, I determined, soon after the local anæsthetic effects of cocaine upon mucous surfaces had been ascertained by KOLLER, to test the efficacy of coca preparations as a means of diminishing the extreme sensibility of the gastric mucous membrane in sea-sickness. It appears to me clear that, if we could but remove or diminish the irritability of the stomach, thus preventing or modifying the transmission of impressions to the central nervous system, and at the same time render the latter obtuse to all excitations emanating from the peripheral nervous apparatus, a great stride would be accomplished in the treatment of sea-sickness. To this end, I have recently resorted to the expedient of giving the bromides in sufficient quantities, before embarkation, to obtain well-marked physiological effects, and have supplemented their action by the copious administration of the extract of coca upon the departure of the vessel. The administration of both remedies was continued throughout the entire duration of the voyage, though it is probable that the doses of each might have been materially reduced had I been able to watch the effects of the remedies in person.

From the accounts furnished me by the persons who, at my suggestion, resorted to the above method of treatment, I am convinced that much may be expected from it in future, provided the patient be placed under the immediate supervision of a competent medical attendant. This is the more necessary from the fact that many persons are of a timorous disposition, and upon the first appearance of the characteristic effects of the bromides, either reduce the dose to an inordinate degree or abandon their use altogether. On the other hand, certain adventurous spirits are sometimes encountered, who, disregarding all premonitory symptoms persist in taking enormous doses of the remedies, until checked by the appearance of pneumonia of grave intoxication. Therefore, unless the patient be gifted with a high degree of perspicacity, it is better not to trust to individual intuition in the matters of treatment.

I will only add that the addition of the spinal ice-bag sometimes renders valuable service in the case of persons of unusual plethora; my own experience has, however, taught me this much, that, however efficacious it may prove in certain cases, it only admits of extended employment when used in conjunction with the bromides and coca preparations. Whether the good effects of the latter remedy in sea-sickness are in part due to its influence on the central nervous system, I have never had occasion to determine.

A remedy which, without possessing the local anæsthetic properties of cocaine, resembles the latter in so far as its effects upon the central nervous system is concerned, is caffeine. Citrate of caffeine has been recommended in the treatment of sea-sickness, particularly with a view to alleviating the distressing headaches from which so many persons suffer while at sea. It should be prescribed in the form of a fine powder, in doses of from one to three grains. I quite agree with the late DR. BEARD, that many of the failures with caffeine result from timidity of its use; so that while in exceptional cases it may be well to begin with doses of half a grain, the majority of individuals will require from two to three grains, in order to produce an appreciable effect. Since, however, the preparations of coca resemble, to some extent, in their physiological effects those of caffeine, the former remedy may, in most instances, be submitted for the latter with advantage. The amount of coca required, in order to produce appreciable effects is moreover relatively small, and as we have already had occasion to observe, its local effects upon the stomach are most beneficial.

Chloral, when combined with the bromides, often yields good results in cases of obstinate insomnia, at sea; it may be given per os or per rectum, according to the condition of the stomach.

Atropine has been employed by DR. BEARD in the form of hypodermic injections, in doses of from one two-hundredth to a twenty-fifth of a grain, with a view to supplementing the action of the bromides, when the latter have been employed in moderate or insufficient quantity, or where, from any cause, there is nausea, vomiting, and inability to keep any food on the stomach. I have no experience whatever bearing on the matter; but, from the statistics adduced, the method would seem to recommend itself in extreme cases.

Cannabis indica has been highly recommended by some writers as a substitute for caffeine. In the insomnia, headache, and irritability, which are such frequent attendants upon a voyage at sea, it frequently renders good service. I usually give it in the form of the extract, in doses from one-fourth to one-half a grain.

Although the results obtained from appropriate treatment are usually brilliant, sea-sickness, like some other forms of functional derangement, occasionally defies all the resources of the pharmacopœia. The physician should, therefore, be on his guard not to arouse too sanguine expectations nor to look upon any system of treatment as absolutely infallible.

GERMICIDAL TREATMENT OF GASTRIC DISORDERS.—In an elaborate paper on "Germicides in Medicine and Surgery," DR. BRIGGS (in the Pacific Medical and Surgical Journal) writes as follows concerning some of the special applications of germicides in the domain of medicine:

First as to the alimentary canal. In their abnormal conditions the digestive organs present a nidus peculiarly favorable to the devel-

opment of the lower organisms, and I believe that many, if not most, of the annoying phenomena of indigestion depend on fermentation and putrefaction of their contents. An indigestion dependent either on some passing condition of the primæ viæ or on some solitary indiscretion in diet is often indefinitely prolonged by the development of torulæ, sarcinæ, and other microphytes. The acids and gases evolved by their baneful activity confirm a condition that otherwise would be evanescent. The delayed digestion of the so-called atonic dyspepsia, I am convinced, is often due to the excessive acidity of the stomach contents, which, in its turn, is due to the growth and activity of torulæ and sarcinæ. By the destruction of these microphytes, or even by the temporary inhibition of their activity, we greatly relieve, if we do not cure, the dyspeptic; and certainly in those cases not dependent on incurable organic lesions we make a long stride towards cure.

But how destroy these microphytes or inhibit their activity? Chiefly by the internal use of germicides. Those best adapted to this purpose are, so far as my observation extends, the yellow oxide of mercury, the mineral acids, iodine and carbolic acid.

Of these yellow oxide is probably the most suitable in the majority of cases. It is efficient. It is a digestive as well as general tonic. By its gradual solution its action is prolonged and even extended into the intestine. It is easy of administration. Thus we see that it answers a number of indications most admirably. It should be administered in about 1-10 gr. doses three times a day and always after meals.

Hand in hand with this, of course, should go the proper selection of foods, their thorough mastication, and the use of digestive and general tonics such as pepsin, the vegetable bitters, arsenic, and especially moderate quantities of alcoholic stimulants.

In dilatation of the stomach the administration of the appropriate germicide should be preceded by a thorough washing-out of that viscus.

RINGER and, I believe, FOTHERGILL and BARTHOLOW, recommend the use, before meals, of the mineral acids in cases of excessive acidity, and of the alkalies in deficient acidity, of the stomach contents. This advice, as they say, is based on the physiological fact that alkalies increase the seeretion of the stomach acids, while, on the contrary, acids diminish it. This explanation has always seemed to me a little strained, and especially so since the demonstration of the germicidal power of the mineral acids. Were it the true one, excessive acidity should be its own remedy. The excessive presence of the normal acid, I believe, is very rarely a cause of acid indigestion; on the contrary, the acid of acid indigestion is the acid of fermentation. With this view the explanation of the efficacy of the mineral acids before meals, and of their failure after, is very simple. Administered on an empty stomach their degree of concentration is sufficient to be germicidal, while on a full stomach it is insufficient, and so the would-be remedy aggravates the trouble by adding its own acidity to that already existing.

The value of the mineral acids in this condition is not solely dependent on their germicidal powers; muriatic acid and nitric acid in a less degree assist in the digestion of the albuminoids, and by their astringency give tone to the debilitated mucous membranes,

Muriatic acid before meals, therefore, is one of our most valuable resorces in the treatment of acid dyspepsia.

The bisulphite of sodium in full doses or in divided doses repeated as necessary, is especially adapted to the treatment of those cases of acute septic indigestion, otherwise known as bilious attacks. It occurs to me that perhaps in these very cases it was, that calomel, as an unsuspected germicide, acquired its false reputation as a cholagogue. If administered in the very outset, both experience and observation assure me that bisulphite of sodium will often abort these distressing attacks. Here it is best given in drachm doses dissolved in mint-water to mask its abominable taste.

It must be fresh so as to contain an excess of sulphurous acid, which is liberated in the stomach and on which its efficiency depends.

Iodine in doses of one or two drops well diluted and repeated *pro re nata* seems peculiarly adapted to the treatment of those cases of septic indigestion accompanied by intractable vomiting.—*The Epitome.*

A STUDY OF IODOL.—We have reported in these pages on the uses of iodol, a preparation in many respects similar to iodoform, as reported by MAZZONI, of Rome, who first introduced it, and by WOLFF, who had used it in several hundred cases of wounds as a dressing.

BENNO SCHMIDT also employed it extensively in powder form, in alcoholic solution with glycerin, and in the form of an iodol-gauze. He reports very satisfactory results on application to large, suppurating surfaces, ulcers, fistulous tracts, sinuses, etc. He never observed any symptoms of intoxication, and could not demonstrate any iodine in the urine, even after protracted use. He had no experience of its efficacy and action when brought in contact with fresh wounds.

An antiseptic possessing all of the virtues of iodoform and free from its poisonous properties and disagreeable odor, must proove a great boon in the hands of surgeons and gynecologists. In order to fully determine the qualities, DR. MARCUS experimented extensively upon animals with the preparation, at the pharmacological institute of Gœttingen. The iodol was introduced into the animals, rabbits, by hypodermic methods, by internal administration, by direct injections into the circulation, by cutaneous absorption, and direct introduction into the abdominal cavity.

After hypodermic injection of fifteen grains of iodol in a rabbit weighing four pounds, no abnormal conditions of temperature, pulse or respiration ensued withing eight days, during which the animal remained under observation. In a second animal of the same weight, approximately thirty-seven grains were injected under the skin. On the following day, iodine was found in the urine in abundance, and iodine was excreted in this manner for twenty-one days. The rabbit appeared ill for three days only, having a subnormal temperature and pulse-rate and respiration. No local reaction developed. In a third animal, seventy-five grains of iodol were placed in the subcu-

taneous connective tissue, and the incision exactly stitched up. The animal remained in perfect health during five weeks of observation. The urine contained iodine. Locally, inflammatory reaction with slight suppuration ensued. About thirty days after the introduction of the iodol, the rabbit gave birth to three young ones. The examination of the tissues of these, as to the presence of iodine alkali, was negative.

On internal administration of 2½ drachms in a four-pound rabbit, death ensued after about thirty-six hours. The urine contained iodine in abundance. The liver showed fatty degeneration, and a similar condition was demonstrated in the heart-muscle and the kidneys. Two other rabits of about the same weight that received only about one-quarter of the above stated amount, died after 3 to 4 days, presenting the same pathological changes.

On intravenous injection of four grains in a dog weighing fourteen pounds, no unfavorable signs developed. Another of sixteen pounds also survived the injection of four grains. The urine contained iodine, and in the sediment, fatty epithelia were present.

Inunction of iodol in a rabbit was followed by no reaction. The introduction of seventy-five grains into the peritoneal cavity of a rabbit of four pounds, was followed by considerable illness, the intoxication being manifest by great depression of pulse, respiration and temperature. The urine contained iodine and albumen in considerable quantities. After twelve days, the albumen disappeared and the animal went on to convalescence.

A comparison of the results of this series of iodol experimentation, with the experimental results obtained by BINZ and GRUENDLER, with iodoform, shows that the fatal dose on internal administration is 1.097—1.866 grm. of iodol to one kilogramme of body-weight, and 0.835—1.013 of iodoform to the same weight. Iodoform, therefore, is more poisonous, and, indeed, its percentage of iodine is 7.8 per cent. greater than that of iodol.

Iodol does not produce the narcotism that BINZ describes in iodoform poisoning.

Iodol produces the same histological changes that are developed in iodoform.

Death ensues as by iodoform, under symptoms of depression of the temperature and general paralysis.

Albumen that has been found in the urine after iodol poisoning, is not reported present with iodoform poisoning.

A point to be specially borne in mind is the absence of intoxication after hypodermic and intravenous introduction.

The final conclusion of the reporter is to the effect that iodol is to be recommended in preference to iodoform, on account of its being inodorous and relatively non-poisonous. That it is equal to iodoform in antiseptic qualities is not apparent.—*Weekly Med. Review.*

ARSENIC IN SKIN DISEASES.—In an editorial on the above subject in the current number of Journal of Cutaneous and Venereal Diseases, the author contends that arsenic is too universally employed in diseases of the skin, or at least oftener than is justified by its results. He says:

The claim that arsenic is the most valuable remedy we possess in the treatment of diseases of the skin has been so long accepted as an established therapeutical fact, that any question of its superior efficacy may appear like downright heresy. Arsenic is not only reputed to possess specific virtues in certain forms of skin affection, but it has been accredited with a wide range of therapeutic action, and has been recommended in so many diseases which have no etiological or pathological relationship, that it has come to be considered by many as a sort of panacea for all cutaneous disorders. Certainly no other drug has been so universally employed, and in so large a variety of morbid conditions of the skin.

Whether the reputation of arsenic as a remedy in skin diseases rests upon a basis of sufficiently careful clinical experience is a proper subject or inquiry.

The universality of its employment cannot be accepted as affording positive proof of its therapeutic worth. The history of medicine records many drugs which, after enjoying a more or less extended reign of professional favor, have been relegated to the limbo of forgotten or disused remedies. We do not wish to be misunderstood as intimating that a similar experience is likely to befall the drug now under consideration, but we think it exceedingly improbable that that it will always continue to hold the high place it has occupied in cutaneous therapeutics. For a number of years we have regarded arsenic as a very much overrated drug, and while we recognize its undoubted efficacy in a limited number of chronic inflammatory disorders, we believe that the range of its judicious application is comparatively restricted.

We are glad to find ourselves so nearly in accord with the views embodied in DR. FOX'S propositions, published in the last number of this Journal, respecting the value of arsenic in skin diseases. Especially would we join in his protest against the "practice of giving arsenic in nearly every case of skin disease, as irrational and harmful." A full and free discussion of these important propositions cannot fail to be of the greatest practical interest, both to the specialist and the general practitioner.

That arsenic, perhaps more than any other drug, exercises a positive and direct influence upon the nutrition of the skin cannot be questioned. There is scarcely any form of eruptive disturbance which may not be provoked by its internal use. A reference to the article on "Arsenical Eruptions" in the present number shows how wide is the range of its pathogenetic influence.

The fact that arsenic is capable of producing such a marked and decided impression upon the skin has been held as an argument for its efficacy as a remedy in diseases of this organ, on the principle that the more powerful the poison the more potent the remedy. This principle cannot, however, be accepted as a safe guide in determining the therapeutical value of the drugs employed in dermatological practice. Bromide of potassium, for example, produces eruptive disorders of the most severe and varied character, yet it does not play an important rôle in cutaneous therapeutics. The dermatopathic influence of iodide of potassium is as pronounced, perhaps, as that of arsenic, yet its value is recognized in only a single class

of eruptions. The same may be said of quinine and many other drugs capable of causing a morbid determination toward the cutaneous surface. The study of the physiological and toxic effects of the drug does not always afford correct indications as to its remedial action. Upon this point conclusions of practical value can be gained only by careful and extended clinical observation.

DEBOVE'S "CRAMMING" METHOD IN PHTHISIS.—DR. M. G. KURLOFF, of St. Petersburg, has published a series of observations undertaken with the view of discovering the chemical changes consequent upon the employment of DEBOVE'S "cramming" or "forced feeding" system in phthisical patients. He made six experiments on five patients, who previously to the "cramming" were losing weight, with bad appetites, diarrhœa, pyrexia, and cough, with sputum containing KOCH'S bacilli. The "cramming," which in some cases was carried out by means of a stomach-tube, as practiced by DEBOVE, and in some without, as has been recently recommended by PEIPER, lasted for from three to eleven days, during which period careful estimations were made of the nitrogen excreted in the urine and fæces, similar determinations being made during the three days preceding and the three days following the treatment. The quantity and nature of the food were also noted; and from these data and from various analyses of food made on purpose, the quantity of nitrogen ingested and excreted was determined, and the amount assimilated calculated by subtracting the latter from the former. The material used in the "cramming" process consisted of pulverized meat, from which all the liquid portion had been previously expressed in the manufacture of meat juice, mixed with milk so as to form a drink of somewhat greater consistency than ordinary chocolate. Of this mixture 700 cubic centimetres were given at a time, some 400 grammes of the meat powder being thus introduced into the stomach during the day. It was calculated that this contained as much nitrogen as 3½ lbs. of fresh meat. The patients were, however, not confined to the mixture, but were encouraged to supplement it with milk, bread, and biscuits. The mean daily nitrogen ingested was about 54 grammes, which is as much as is contained in 1,600 grammes (3½ lbs.), of fresh meat. The effect of this huge quantity of nitrogen was to increase the breaking down of the albuminous constituents of the body, as shown by the increased excretion of nitrogen in the urine, which averaged about 34 grammes, the maximum being 65 grammes; whereas, previous to the "cramming," it had only ranged from nine to 16 grammes. An increase also occurred in the percentage of ingested nitrogen which was assimilated, and much more marked increase in the assimilated nitrogen relatively to the body-weight. Taking one instance, the percentage assimilation was before. during, and after the "cramming" 84.9, 92.7, and 82.6 respectfully, and the mean assimilation, expressed in grammes per kilogramme body-weight, was for the same three periods 0.24, 0.89, and 0.29. Thus, during the "cramming" the nitrogen assimilated increased more than threefold, and was slightly more afterwards than previously. Even after the short period during which the treatment was continued, which was undertaken more for experimental than for curative purposes, the patients' appetites increased remarkably; they not only ate the whole of the ordinary hospital ration, but asked for more, though previously they had left a considerable portion of their food. The body-weight also increased nearly one pound a day, the increase continuing even after the special feeding was discontinued. Altogether, DR. KURLOFF fully confirms the results DR. DEBOVE and others have obtained by this method of treating consumptives. The cough and expectoration diminished, the diarrhœa and night-sweats ceased, and the patients felt a great deal better, so that some of them left the hospital and returned to their respective employments.—*Lancet.*

ANTIPYRINE IN PUERPERAL FEVER.—DR. JOHN BLAKE WHITE, in the Medical News, July 10, 1886, reports the following results obtained by him in reducing temperature in puerperal fever by antipyrine. After narrating four cases, illustrating the happy effects of the drug, he continues:

"I have had the same satisfactory results follow after using this drug in other cases of like character, but these instances have been selected for report as characteristic cases, and and are sufficient to prove the value of antipyrine in puerperal fever, as well as to place it among the most safe and useful antipyretic remedies in all fevers.

I have had no reason to think that the remedy exerts any direct influence upon the uterus by which the lochial discharge is restored when suppressed, but it has seemed that this good result was effected secondarily through the reduction of the high temperature which is always present in these cases. It appears to me that the pyrexia in puerperal fever checks involution, and an arrest of the lochia follows. This discharge becomes reëstablished upon the reduction of temperature brought about, I think, by the sedative effect of antipyrine upon the circulation, and its effect upon the vasomotor system, dilates the capillaries and modifies or removes local congestion.

I admit the difficulty of determining as yet how the antipyrine acts, but it cannot be doubted that it exercises a bradycrote influence upon the circulatory system. DUJARDIN-BEAUMETZ thinks the toxic effect of antipyrin the same as that of resorcine or carbolic acid, though less manifest than in the two latter drugs. He says that it produces in over-doses, tetanic and paralytic symptoms, analogous to those caused by strychnine, and declares that it cannot be doubted that the drug acts upon the cerebro-spinal axis and probably lowers temperature by effecting a modifying influence on the nervous heat centres. Or, does the remedy enter the blood and arrest fermentative processes excited therein by a specific fever germ, and thus control high temperatures?

My experience with the remedy, in both hospital and private practice, in the treatment of many fever cases, has taught me that it should not be combined with any remedy which acts as a sedative upon the circulatory organs. Doses of 15 or 20 grains, repeated in one, two, or three hours, *pro re nata*, appear to be the

only safe way in which to prescribe it. I have seldom found it necessary to give more than three or four doses of the amount cited, and this repeated at such stated intervals is found to reduce the temperature effectually and sometimes permanently from 105° to 100° or less. If fever should recur, this dose continued once or twice daily until convalescence is advanced, will prove a useful adjunct to other treatment.

Since the preparation of this paper, I have read with much interest an article by DR. A. A. SMITH, in which he bears testimony to the value of antipyrine, 'as the most useful and safest antipyretic yet discovered if used in not too large doses, and if in connection with its use cardiac stimulants be given when there is any suspicion of cardiac enfeeblement.'

The only cases in which I have found it necessary to combine any stimulant with antipyrine, have been such as would have demanded stimulation under ordinary circumstances, from the debility consequent on the affection itself, and not because of any depressing influence incident to the employment of the drug.

THE TREATMENT OF STRICTURE BY ELECTROLYSIS.—The British Medical Journal, of May 29th, contains the following criticism of this, as yet unsettled method:

The treatment of urethral stricture by electrolysis is one of which there is, as yet, very little practical knowledge in England; and we confess we were glad to see it brought forward by DR. W. E. STEAVENSON and MR. BRUCE CLARKE, at the Royal Medical and Chirurgical Society. Interest in the subject was first aroused by one of the daring attempts of American surgery, made by DR. R. NEWMAN, of New York, who published, about eighteen months ago, "Tabular Statistics of One Hundred Cases of Urethral Stricture treated by Electrolysis, without Relapse." It would have appealed, perhaps, even more strongly to those who believe in the fallibility of human nature, if there had been one or two relapses. The fashion of operating admits of many small variations; but the essential points are, that one pole of the battery shall be of metal, and in contact with the surface of the stricture, and the other widely spread out by means of a pad over a considerable surface of the body, the back, or elsewhere: and that between these poles a current of considerable strength should be passed. It is found most successful and least uncomfortable that the negative pole should be in contact with urethra; the positive with the body. A current may be passed which is strong enough to act upon the stricture without giving any discomfort, except, perhaps, at the moments of making and breaking. What the exact action of the current upon the cicatricial tissue may be, we are hardly in a position to say, though the actual watching of the process by means of an endoscope, as practiced once by DR. BERKELEY HILL, may throw more light upon it. It is covered, at present, by the word "electrolysis," of which, when applied to fibrous tissues, we must admit that the limits are somewhat indistinct. At any rate, it is alleged that not only does the resistance of the stricture give way, but that more or less of the tissue which forms it is turned into a slimy mass of broken down epithelium, and so disappears, without leaving a contracting cicatrix. The *a priori* impression is certainly strong that, where tissue has disappeared, there must be a cicatrix; and that, if there is a cicatrix, it must contract, sooner or later. Those who have practiced electrolysis will gain a much more attentive hearing and a more zealous following when they show a longer maintenance of good results than the eight months which have elapsed since MR. BRUCE CLARKE'S operations. When the malady is chronic, it naturally needs a long time to judge of the cure; but, at the same time, the habits of scars, due to different causes, are known to vary in contraction, and it is possible enough that there may be less contraction after electrical action than any other, even from those of caustic alkalies. And, further, we are not yet experienced enough to assert how completely similar or dissimilar to an ordinary cicatrix this process of electrolysis may be.—*Weekly Mid. Review.*

THE GENERAL MANAGEMENT OF CASES OF ENLARGED PROSTATE.—In concluding a paper entitled "The Pathology and Treatment of Enlarged Prostate" (N. Y. Med. Jour., July 10, 1886), DR. F. W. ROCKWELL thus describes the general management of these cases:

"Three drugs are at the present time given with the belief that they exert a direct influence on the disease. I name them in the order of their value, so far as I have personally been able to judge of their effects, or ascertain the estimation in which they are held by the profession. They are ergot, iodide of potassium, and chloride of ammonium. Of the first of these I can speak in terms of confidence, since I have seen as decided effects from its use as we ever do from therapeutic agents, and in cases where no other treatment was applied. I can see why, on general principles, it should act on the muscular tissues of both bladder and gland, and I give it, accordingly, in full doses.

One of my patients, who had an immense posterior and lateral hypertrophy, and who was relieved of his first retention by the smallest catheter I own, after taking pounds of the drug for a year or two, was completely relieved of his symptoms, and that with no instrumental treatment, except that necessary to empty his bladder in a few attacks of retention. Improvement of a marked character was manifest during the first three months of treatment, and I have seen the same benefit in other cases, even where cystitis of a severe grade complicated the original disease. This drug I accordingly give in most of my cases, watching my patients' general health, instructing him in the daily use of the catheter, where chronic retention exists, and also in irrigating the bladder if cystitis exists or is threatened; warning him to report any unusual appearances in his urine, watching its reaction and specific gravity, from time to time, for any indications as to treatment; impressing on him the danger of being placed in circumstances where he cannot empty his bladder at will; also that he shun cold and damp, and protect his skin by suitable flannels worn next it the year through; that he be temperate in diet and drink, and especially as to quantity and quality of the latter, even with water, tea, or coffee, making his daily con-

sumption proportionate to his experience as to his actual need, and warning him that an excess of fluid in his bladder will not be tolerated as in youth; and, lastly, I endeavor to have him acquire regular habits as to the time of passing water, especially if he has to irrigate or artificially empty the organ. Strict observance of these rules makes the life of sufferers from even advanced prostatic disease tolerable, in many cases comfortable."

Salol, a New Antirheumatic and Antiseptic.—The Medical News contains the following, reported in the Wiener Medicinische Presse:

Von Nencki and Sahli have discovered and made use of a new combination of salicylic acid, which presents certain advantages over the salts at present in use. In the new compound the acid is chemically combined with phenol, and forms a white, tasteless powder nearly insoluble in water, but quite soluble in alcohol. Experiments show that this compound, called salol by Nencki, is unaffected by gastric digestion, but is, in pancreatic digestion, decomposed into its component parts, which are absorbed and excreted unchanged. Under its use the urine becomes very dark, but no disagreeable constitutional effects are produced. Sahli has himself taken the drug in doses of from 90 to 120 grains without producing ringing in the ears, and in other individuals experimented upon this symptom was always less marked than in the case of an equivalent amount of the ordinary salicylic salts.

The efficient dose is found to be thirty grains given three or four times daily. Thus administered, its effects in acute, subacute and chronic polyarthritis and muscular rheumatism, were found to be fully as advantageous as those of the exhibition of sodium salicylate, while the fever appeared to be more rapidly diminished.

A case of chronic urticaria, which had resisted treatment for several months, was rapidly cured by this agent, as were also several cases of supraorbital neuralgia.

The fact that the urine of patients thus treated remains unchanged, even when kept at body temperature for weeks, suggests the possibility of the usefulness of this treatment in vesical catarrh.

Nencki has obtained good results from the local application of the drug in ozœna, otorrhœa, and gonorrhœa.—*Weekly Medical Review*, July 3, 1886.

Codeia in Diabetes.—Dr. A. A. Lendon, in the Provincial Medical Journal, narrates the history of two cases of diabetes in which marked relief was afforded to the symptoms by codeia. He says:

"I am well aware that these notes are very meagre, but still I think they illustrate some facts which have previously been pointed out, viz: that codeia has a great influence in preventing the formation of sugar in diabetes mellitus, and that it can control the amount of urine secreted in diabetes insipidus. That this influence is exerted through the nervous system, and probably through the centres in the medulla may be assumed from our knowledge of artificial diabetes, and from the history of the first case I have narrated. Lauder-Brunton suggests that it lessens the irritability of the different fibres of the vagus and other sympathetic nerves in the abdominal viscera, and thus prevents the dilatation of the hepatic vessels seen in diabetes.

The scanty recognition given to this use of codeia in the various standard works on therapeutics is the more remarkable, as its value as a remedy for cough is widely appreciated. For instance, I have lately been using it with great success in a case of chronic phthisis in a woman of 40, who is absolutely intolerant of opium or morphine in any form.

Another advantage that it has over morphine is its much weaker narcotic power. It is interesting to note that it is chemically like some of the other opium alkaloids, probably a derivative of morphine, namely, methyl-morphine."

Effects of Drugs on the Sweats of Phthisis.—Dr. Abletsoff, who has made a number of accurate observations on the effects of various drugs upon the sweats of phthisical patients, finds that hydrochlorate of pilocarpine, given in doses of a twentieth of a grain, produces no limitation of the sweats in a very large proportion of cases; but its use frequently causes or increases gastro-intestinal irritation and sleeplessness, and, in fact, makes the general condition of the patient worse. With doses of from one-eighth to one-sixth of a grain the diurnal and nocturnal loss of weight almost increases, and with doses of from one-twentieth to one-tenth of a grain the loss is augmented in the majority of cases. The reasons why this drug has been recommended for phthisical patients are probably to be sought in its expectorant action; but though as a matter of fact the amount of sputum daily expectorated is increased by the drug, it has no advantages whatever over other remedies whose effects in other directions are not so deleterious. Homatropine, picrotoxin, and duboisin distinctly decrease the cutaneous perspiration in healthy subjects, the latter drug having the greatest effect. For phthisical patients, however, who are weakened by exhausting sweats, more suitable drugs will be found in agaricin and homatropine, as duboisin and picrotoxin frequently produce other and undesirable effects.—*Lancet*, July 3, 1886.

A Curious but Important Test.—The result of a curious but very important test as to the accuracy with which chemists, druggists and others make up prescriptions committed to their care has recently been presented to one of the London vestries. Fifty prescriptions were sent out to ordinary druggists, to co-operative stores, to "doctors' shops," and to certain traders styling themselves drug companies. The mixtures made were afterward analyzed, to find out how nearly they agreed with the prescription they represented; but in order to give a liberal margin for error, it was resolved not to put a black mark against any one if the chief constituents were within 10 per cent. of the right amount.

Notwithstanding this margin, no fewer than seventeen out of the fifty mixtures were incor-

rectly dispensed. In one case the principal drug was less by 85 per cent. than the amount ordered, while in another it was 57 per cent. in excess. The chemists and druggists came out best in this strange competition, as only six per cent. of their prescriptions had to be called in question. Next came the co-operative stores, with 20 per cent. of error; then the "doctors' shops," with 50 per cent.; and lastly, the drug companies, who are credited, or rather discredited, with 75 per cent. of errors.—*Chambers' Journal.*

THE USES OF ESERINE SULPHATE IN DISEASES OF THE EYE.—From the reports of others, and from my own experience, I feel justified in concluding eserine is indicated: 1. In acute affections of the cornea, involving the deeper layers. 2. In threatened perforation. 3. In diseases of the cornea where atropia fails to cure, and where the danger from posterior synechia and subsequent iridectomy is less than the present danger to the cornea. 4. In prolapse of the irris and beginning staphyloma. 5. In some cases of dislocated lens. 6. In paralysis of the ciliary and iris branches of the third nerve. 7. In glaucoma.

DE WECKER sums up his opinion of eserine in these words: "In the use of eserine a step in advance has been made in ocular therapeutics. I do not exaggerate when I say that, thanks to our being able to substitute it for atropia, we are able to save eyes which formerly would have recovered, if at all, with more or less considerable staphyloma—a condition which would have left scarcely any hope of a restoration of vision. Furthermore, the powerful aid rendered by eserine should encourage any careful practitioner not to resort too readily to surgical interference in abscess of the cornea.—F. H. HANSELL, M. D., in the *Col. and Clin. Record.*

COCAINE IN LAVAGE OF THE STOMACH.—DR. CHARLES N. DIPON JONES, of Brooklyn, writes: "Gastric lavage is rapidly becoming our most reliable treatment in chronic dyspepsia and gastritis. In order to avoid some of the disagreeable features attending this operation, I have resorted to the following expedient: About fifteen minutes before commencing the operation the patient is allowed to hold in his mouth a piece of absorbent cotton saturated with a 4-per-cent. solution of hydrochlorate of cocaine; in a few minutes the palate and fauces are painted with the same solution. The stomach tube is lubricated with a mixture of olive-oil, oil of wintergreen, and cocaine, after which it may be introduced and the stomach irrigated without that disagreeable vomiting of the tube, and efforts at gagging, which frequently attend the operation. I have adopted this method in some of the most trying and difficult cases, and always with the most happy result."—*Medical Record*, July 3, 1886.

TONGA IN THE TREATMENT OF HEMICRANIA.—DR. JOHN HENNING, in a letter to the Therapeutic Gazette of June 15th, reports a case of severe hemicrania in which all of the usual remedies had been administered over a period of two months. The patient was free from pain only when under the influence of morphine. Fluid extract of tonga was finally tried, in doses of thirty minims every three hours, three successive doses being administered in the course of twenty-four hours. A radical cure was obtained after the use of nine doses.

PHOTOGRAPHIC DIAGNOSIS. — HENRY DE PARVILLE, in Le Gagne-Petit, tells of a case in which the sensitive plate for a photograph showed some very peculiar dark specks. When the sitting was made the subject had peculiar sensations of the skin, but nothing was visible. Two days after the sensitive plate announced that something was wrong, the woman was taken sick with an eruptive fever.—*Med. and Surg. Reporter*, July, 1886.

LEWININ AS A SUBSTITUTE FOR COCAINE.—The American Medical Journal, quoting the Medical News, states that DR. HARRISON ALLEN, after experimenting with a fifty-per-cent. alcoholic solution of lewinin, reports that, in practice, he has found a number of cases of nasal trouble in which the drug could not only be availably substituted for cocaine, but in which its action was more satisfactory.

WHOOPING-COUGH SUCCESSFULLY TREATED BY INSUFFLATIONS OF QUININE.—DR. J. BACHEM, of Bonn, has treated sixteen cases by blowing into the nostrils a mixture of quinine muriate and powder of gum arabic (3 to 1). The application was made once or twice daily, and the disease was cured in almost all cases in about three weeks.—*Med. Record*, July 3, 1886.

HYPODERMIC INJECTIONS OF EUCALYPTOL IN PHTHISIS. — ROUSSEL ("Allg. wiener Med. Ztg.") reports favorable results following the use of this treatment; purulent sputa became mucous, the appetite and strength returned, and the cough was relieved.—*N. Y. Med. Journal.*

VALERIAN IN DIABETES INSIPIDUS.—DEMANGE says, in L'Union Medicale, that diabetes insipidus is best treated by valerian in doses of two to four drams of the powder per diem. This drug has been highly praised by TROUSSEAU, and since his day has been revived by BOUCHARD.—*Weekly Medical Review.*

PILIGANINE.—M. ADRIAN has discovered a new alkaloid in lycopodium saussures. It has an alkaline reaction, and emits white vapors, like ammonia, in the presence of hydrochloric acid. It causes powerful emesis and catharsis. *Lancet*, July 3, 1886.

Our Advertisers.

BUSINESS NOTICES.

A Philadelphia correspondent sends us the following letter:

During the last five years the Medico-Chirurgical College which was chartered by the Legislature in 1850, has been located at the south-west corner of Broad and Market streets. The needs of this rapidly developing institution have outgrown its present quarters and for some time the trustees have been looking for more commodious buildings. Recently they concluded the purchase of a large property on Cherry street near Logan Square. The location is most excellent for the intended purpose; being near the centre of the city, and yet sufficiently retired to give students and hospital patients the requisite quietude. The lot is 134 feet square. It is partly occupied by two large and substantial brick buildings three stories high, with good light on all sides. Extensive alterations will be made, including the construction of an amphitheatre, clinical lecture room, laboratories and dissecting room, besides all the departments of a well-appointed hospital.

The lecture-room will be fitted up with an eye to the comfort of the students; individual chairs replacing the benches usually supplied. The rooms for practical work will have all their fittings of the latest and most approved pattern. The hospital wards will overlook and have easy access to the large garden attached.

Plans for the alterations are now being prepared by the architect, and when finished the corporation will have one of the most complete college buildings in the country.

Within the ample bounds of the newly acquired property will be located the following institutions:

1. The Medico-Chirurgical College, founded in 1850.
2. The Medico-Chirurgical Hospital, chartered in 1882.
3. The Philadelphia Dental College, now at the corner of Tenth and Arch streets.
4. The Hospital of Oral Surgery, whose clinics have no rival in that specialty, has coalesced with the Medico-Chirurgical Hospital.
5. The Philadelphia Hospital for Skin Diseases, now at 923 Locust street, which will also be continued as a department of the above-named institution.

Several notable changes have lately taken place in the faculty of the Medico-Chirurgical College. PROF. WM. H. PANCOAST, who for 27 years has been teaching anatomy at the Jefferson Medical College, has resigned his professorship in that institution and has accepted the same chair in the Medico-Chirurgical College, to which he was elected by the trustees. He brings with him the extensive anatomical museum collected by himself and his father, which for so many years was employed in teaching the classes at the Jefferson College.

DR. JOHN V. SHOEMAKER, lately lecturer on dermatology and teacher of skin diseases in the Post Graduate course at the Jefferson College has become Professor of Dermatology at the Medico-Chirurgical College.

DR. E. E. MONTGOMERY, Obstetrician to the Philadelphia Hospital and surgeon to the Woman's Hospital, has been elected Professor of Gynecology.

Upon whatever other points they may differ, authorities on dietetics agree that nitrogen is the moste essential of all foods, and that a certain amount should be taken regularly. Diminution of the quantity of food, whether from inability to procure it, or a disinclination for it, generally means decrease or absence of nitrogen. That this leads to dire results is a well-established fact. GRAILY HEWITT, in an address on "Chronic Starvation and Delicate Females," before the British Medical Association, said: "For the last ten years or more I have carefully inquired into the history of patients suffering with uterine or ovarian disease, or some affection incidental to child-bed, and I have found a continuous insufficiency of food, especially the nitrogenous, to have existed almost universally, so that I have naturally come to regard this chronic starvation as an important factor in disease."

COLDEN'S LIQUID BEEF TONIC contains precisely the elements indicated by DR. HEWITT as being so essential, combined with citrate of iron, cinchona, and simple aromatics, forming at once a palatable nutriment and reliable tonic, and its range of usefulness embraces all cases of debility of whatever origin. It has been in use fifteen years, and those who have used it most are most emphatic in its praise.—*Massachusetts Medical Journal*, June, 1886.

TRYPSIN has been employed of late in the treatment of diphtheria for the purpose of dissolving the exudation membranes, over which it appears to possess no inconsiderable solvent powers. According to DR. SAUNDERS, of St. Louis, Mo., it invariably cleared off the membranes in sight in less than a day, and even in cases which terminated fatally, it certainly appeared to delay the fatal issue. It does not, of course, relieve the œdema which precedes and accompanies diphtheritic exudation, and for obvious reasons cannot be thoroughly applied to the larynx. Apparently we have here an agent which gives promise of great usefulness in some of the worst types of diphtheria and membranous croup. A good strength to use is thirty grains to the fluid ounce of water with ten grains of bicarbonate of soda. This solution should be applied over the parts every half hour until the membrane disappears.—*Med. Press and Circular.*

MAURICE HACHE, M.D., 8 Rue de Tournon Paris, May 18, 1886, says: I have tried Bromidia in two cases, one patient suffering from a slight febrile affection, the other a victim of acute insomnia; in the latter case various preparations of opium had proved useless and the administration of chloral was followed by lassitude and congestion in the head.

Bromidia produced sound sleep in both of these cases, unaccompanied by any unpleasantness on awaking. In my opinion this preparation is destined to render good service, and I intend prescribing it whenever the opportunity presents itself.

The Medical Age.

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Original Articles.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, July 6, 1886.

The President, E. J. DOERING, M. D., in the chair.

DR. CHARLES T. PARKES reported a case of urinary fistula of twelve years' standing, from gunshot wound of thigh. The track of the bullet had been such that the urine could escape through the wound on the thigh. Several unsuccessful attempts had been made to close the fistula. While examining the bladder with a sound, DR. PARKES discovered a stone. Lithotomy was performed and now the patient urinates per urethram, and the fistula is closing. The calculus was the size of a pullet's egg and the nucleus consisted of a piece of bone.

DR. PARKES also exhibited a thirty-pound multilocular ovarian cyst with jelly contents, which had been removed without enlarging the original incision. He also exhibited specimens of hydatids of abdomen connected with liver, spleen and intestines. Exploratory operation had been made, but the hydatids were so numerous, large, and adherent that they could not be removed. Patient died of exhaustion. Hydatid of spleen measured twenty-three inches in circumference.

DR. W. T. BELFIELD said: The case in which I am particularly interested is the one in which the stone was found in the bladder. I congratulate DR. PARKES on his discovery of that stone, because the case had been a reproach to surgery for twenty years. I once saw the patient, who was kind enough to perform for my benefit, and threw a stream some little distance through the fistula in the thigh. Probably the stone was overlooked from the fact that it was situated pretty high up, attached to the upper wall of the bladder. I recently had a case in which stones weighing 2½ ounces had been carried by the man for eight years; he had been sounded a number of times, once under chloroform, but with negative results every time. In that case I found one of the stones attached to the fundus of the bladder, the other esconced behind an enlarged prostate.

DR. R. G. BOGUE said: Mr. President, the cases presented are of a great deal of interest. Probably the most interesting feature of the case of stone in the bladder, was the discovery of the offending body and its removal. The strange paths that bullets take in their course through the body, or a portion of it, were found to be so various by those who had opportunities for observation during the war, that the fact of this bullet passing into the side of the thigh, wounding the bladder and and passing out through the peritoneum, was not so very strange; but the repair which took place in the track of the bullet, the lodgement of the large fragment of bone such as we see here, within the bladder, where it remained for so long a time without giving a great deal of trouble, is somewhat singular, and the long experience that the man had in seeking relief, or cure, without avail, and the probably accidental discovery of the real difficulty and the cure by removal of the stone, render the case one of a good deal of interest.

The case of hydatid cyst is also of much interest. Hydatid cysts are comparatively rare, although in hospitals where a great many post-mortems are made, they are frequently found; in many instances they give so little trouble during their growth that they are only found upon post-mortem examination as an accidental affair, the liver being the seat of the great proportion of instances of their development. In looking over the first volume of the catalogue of the museum of St. George's Hospital, of London, I find that there are eighteen specimens of hydatid cysts mentioned, one of the lungs of a lad who had had chronic cough for some two years, which subsided after he had expectorated an hydatid cyst. All the other hydatids developed from the liver; one was a case of multiple cyst where a large cyst had developed upon the superior surface of the liver, causing absorption of the diaphragm, entering the thoracic cavity and becoming adherent to the right lung; the abdomen was quite filled with tumors attached to the omentum, the spleen, the kidney, and the under surface of the liver and some to the peritoneal surfaces. In this case there had been, no doubt, a ruptured cyst, as the young man had fallen while at play and the accident was followed by severe symptoms of prostration or collapse, with recognized peritonitis, from which he finally recovered, but afterwards died of erysipelas. The tumors in the abdomen had been diagnosticated some two years previ-

ously, but the death was from cause other than that connected with the growths themselves, and the revelation upon post-mortem was that of extensive hydatid disease, the greater part being connected with the liver. All of the other instances of hydatids were of the abdomen, connected with some portion of the liver, either within the organ or upon its surface, so that in all of these eighteen cases the specimens were from the liver or within the abdomen, having the liver for their primary seat, with the exception of the one in the lung.

DR. J. S. JEWELL said he had been deeply interested in listening to the cases reported by DR. PARKES, but most especially in the cases of urinary fistula. He thought in such cases as stone in the bladder, as well as all others, there should be the most thorough and careful investigation. When one undertakes to explore the bladder for stone, cases like this ought to be held in mind. He suspected that in the case in question DR. PARKES was pretty nearly giving up the examination with the sound when he made the last sweep that brought the stone to light. He was impressed with the necessity for more thorough work than is usually given in the matter of diagnosis. He was becoming more careful every day, as a matter of habit and duty. In studying cases, apparently the most simple, one often finds, where he least suspects it, remarkable things. He thought there was too much hap-hazard diagnosis to produce first-class work, and this case is an example of it, for if DR. PARKES could find the stone, others should have done so.

DR. C. T. PARKES, in closing the discussion, said: DR. JEWELL is correct in his supposition that it was by mere accident that I found this stone. Perhaps I neglected to say there is no tissue in the body that is free from this parasite; there are only certain places in the body where it is found with the absence of an adventitious sac, but some, especially those found in the brain, are usually cysts with but two layers, the terminal membrane and the external layer. There are many things that seem to refer their formation and development to the circulation of the broad cells through the blood, and there are many things that seem to show that this cannot be possible.

DR. HENRY T. BYFORD read a paper entitled

THE MECHANICAL TREATMENT OF RETROFLEXION OF THE UTERUS.

The means for correction of the retroversion are of four kinds:

1. Those which permanently fix the fundus in front of the pelvic axis.
2. Those which draw or fix the os back of the pelvic axis.
3. Those which place a barrier or obstacle to the forward displacement of the os and cervix.
4. A combination of two or more of these methods.

The fixation of the fundus forward has been done in four principal ways:

1. By the ALEXANDER operation, in shortening the round ligaments. It was suggested by ALQUIE, recommended by ARAN, experimented upon on the cadaver by W. A. FREUND, and successfully performed and established as a therapeutic measure by W. ALEXANDER.
2. The stitching of one or both round ligaments to the abdominal walls; as has been done with permanent success by WM. H. BYFORD while performing laparotomy for another purpose.
3. The stitching of one or both of the broad ligaments to the abdominal walls; as successfully done by KOEBERLE and SCHROEDER, and perhaps others, during laparotomy for other pathological conditions.
4. The stitching of the uterus to the abdominal wall, as recommended by MUELLER and TAIT, and performed by HEYWOOD SMITH by an especial laparotomy.

The drawing or holding of the cervix back has been accomplished by uniting the cervix to the posterior vaginal wall by adhesive inflammatlon or by operation, as recommended by LOEWENTHAL. But the most available method is by the use of pessaries of the HODGE class, such as the ALBERT SMITH, THOMAS, EMMETT, HEWITT, HAUKS, NOEGERRATH, SCHROEDER, GEHRUNG, etc., which hang up the cervix posteriorly and drop the fundus forward, and thus supplement or supplant the posterior suspensory ligaments. The modifications of the PRIESTLY instruments, CUTTER'S, LAZAREWITSCH'S, THOMAS'S and SCOTT'S, are also useful. H. MARION SIMS' new retroversion Hodge and stem pessary, may be classed here, although not original in action. PEASLEE'S, MEYER'S, DUPONT-PALLIER'S, the inflated rubber rings and bags, etc., are to be taken out oftener than to be put in.

The cervix may be kept back by lubricated cotton plugs, changed every day, or by pessaries such as the Courty, the Gehrung retroversion and the author's new instrument, which consists of a thick crescent held in front of the cervix by being attached to the arms which work on the lever principle. It looks something like a Thomas retroversion pessary bent so as to come in front of the cervix. It has been made to fulfill the following six requirements:

1. To place the uterus in a normal or nearly normal position.
2. Not to interfere with the natural supports.
3. To afford an elastic or yielding support.
4. Not to interfere with the use of a speculum.

5. Not to interfere with the marital relations.

6. The patient shall be able to introduce and remove it.

The Hodge variety are generally faulty as to requirements 1, 2 and 3.

The patient in most instances has but to introduce the neck and shoulders of the instrument, assume the knee-chest position and push it into place. It allows the vagina to collapse and does not press injudiciously upon the uterine supports.

Especial contra-indications to this form of pessary are: tenderness or induration in the vesico-cervical region, decided retroflexion, an insufficient projection of the cervix into the vagina, and an unusually short anterior wall of the vagina.

Especial indications are retroversion with subinvolution after abortion or labor, or with bilateral laceration of the cervix in which the traction of the other forms act hurtfully, in a lax vagina, post cervical tenderness.

In preparing a subinvoluted uterus with bilateral laceration and eversion, but without retroversion, it is exceedingly useful for lifting the uterus off the pelvic floor. Latero-version may be corrected by raising one shoulder of the instrument.

Dr. Byford described and illustrated by charts a new operation for raising the perineum and pelvic floor in such a manner as to form an obstacle to the forward displacement of the os and cervix, and at the same time strengthen the vaginal connective tissue attachments. The denudations run across the muscular fibres of the levator ani in such a manner as to enable the operator to shorten those fibres and thus lift up the perineum, posterior vaginal wall and pelvic floor, to the greatest possible extent with the smallest loss of tissue. A transverse strip is denuded just posterior to the fourchette or carunculæ, and a narrow triangle with its base at the posterior commissure, or behind it, and apex in the posterior vaginal wall, made to cross it. This makes a sort of star whose angles are sewed up in the form of a cross, the transverse strip coming together as a transverse line, the triangle in a line at right angles to it and passing up the posterior wall of the vagina. Sometimes the vulvar wedge or base of the triangle is entirely left out, and sometimes represented by a nick in the fourchette; and sometimes the apex of the triangle is represented by two lateral strips passing to the side of the rectum, the latter for the purpose of getting at deeper fibres of the levator ani.

The size of the different parts of the figures must be determined by the case, and are usually very small in those who may be expected to bear children afterwards. The denuded areas must sometimes be altered so as to remove cicatrices and repair particular injuries, the principle of the operation being to produce a natural elevation and condition of the parts, instead of constructing an artificial or unnatural body or cicatrix. In cases of unusual difficulty the uterus should be anteverted and the anterior vaginal or cervical wall be united to the posterior vaginal wall where they meet, and the operation for raising the perineum and pelvic floor then performed.

The Fitch and Studley, Schultz's figure eight and sleigh pessaries, the Hurd, Fowler, Fritsch and Woodward, are cited as examples of tractions behind combined with pressure in front of the uterus. Many of them are faulty in that they produce a rigid fixation of the cervix—and such should be avoided. Other combinations are mentioned.

The author recommeds the mechanical treatment of retroflexions chiefly as an aid in their treatment, and would especially keep back operations as adjunctives, palliatives, last steps or resorts, or as the least among evils.

Dr. H. P. Merriman: I have been very much interested in the paper, which I think is a valuable one. It seems to deal not merely with the subject of pessaries, but with the various means of support in the case of retroversion. I think a great many physicians, when they find a retroversion, without stopping to consider its cause, at once feel that it is necessary to employ a pessary, and in a great majority of instances the use is followed by failure to cure. We all know that retroversion of the uterus has more than one cause; it is in a great many cases due to pressure from above, to weight within the uterus itself, as in the case of a fibroid tumor; the use of the pessary in these cases is of no value—it is only when there has been a weakening of the supports. In the case of weakened ligaments the pessary is of value as a temporary expedient. When the retroversion is due to a weakened vaginal support, which is true in the great majority of cases, for when we find the perineum ruptured, even partially, we are going to have, sooner or later, a retroversion. We find pessaries valuable in these cases, though, as a rule, we should not depend upon them permanently, because we need to restore the vaginal supports by some kind of operation, such an operation as restoring the perineum and curing a rectocele or cystocele, or by the general operative procedures Dr. Byford has mentioned. It strikes me that what we need in nearly every case is to examine the vagina and restore it to its proper shape and position. The uterus is retroverted because the vaginal support is gone, the wall of the vagina has become relaxed and is letting down the uterus, and we want to restore that wall of the vagina. If there has been a ruptured perineum you must restore the perineum, if there has not been we may be able to restore the uterus, and by keeping it in place for six months or a year regain the support of the

rested vagina. This will be done in a little different way from what DR. BYFORD has suggested. We have got to fit something to the vagina that will extend the posterior wall and push up the cul-de-sac back of the uterus. We cannot do that where there is tenderness, or where there is a tumor; but where there is not, and it is merely a simple retroversion, then it will be necessary to fit the pessary to the vagina and have it fit in such a way as to elongate and support the vagina in a natural shape. It always distresses me when I hear men speak of fitting a pessary to the uterus. I do not believe it should be fitted to the uterus. It should be fitted to the vagina; the object is to restore the vagina to its natural position; we must choose a pessary especially adapted for that purpose, and it should lie easily in the vagina.

DR. WILLIAM BYFORD said: Mr. President, I came here with the determination of not speaking upon this subject to-night, because the scope of the paper is so great that if I were to undertake to comment upon half the points it would take too long. I believe the principles of the paper are correct for the treatment of this form of displacement of the uterus, especially the one of acting upon the cervix. My impression is that in retroversion of the uterus there is stretching of the utero-sacral ligaments until they are relaxed, and we find connected with it relaxation of the vagina, which I think is more frequently the consequence than the cause.

DR. FRANKLIN H. MARTIN asked DR. BYFORD what advantages he claimed for his pessary over the German sleigh pessary? If the fulcrum of this pessary is as indicated in the large diagram, situated at a low point on the posterior vaginal wall, how is he going to get any support for his fulcrum in a case of lacerated perineum? His illustration represents the fulcrum resting very low in the vagina, and it would have no support if the perineum is even partially lacerated.

DR. T. D. FITCH said: DR. MERRIMAN thinks supports for the uterus are abused. I think so also; they are abused because practitioners do not take the trouble to enlighten themselves with regard to the use of these mechanical supports, but when they get a case that requires a mechanical support they go ahead thoughtlessly to adjust a pessary of the latest device to support a displaced uterus. If from different causes the uterus has become displaced, do not the uterine ligaments become weakened as the result of that displacement? You never have a case of displacement that the uterine supports do not become weakened and relaxed, and can you tone up a muscle or a ligament that is placed upon the stretch to its utmost capacity, by any means, while in this tense condition? It is impossible. We must assist those ligaments to regain their tone by these mechanical supports, relax the ligaments, give them rest, and then by local and general treatment give them tonicity. Having done this you can remove you artificial supports. I fully endorse what DR. MERRIMAN says with regard to fitting the pessary to the uterus. The pessary should conform to the normal form of the vagina, and that is why we have to have this flexible material so that we can bend them by heat and make them fit the different shaped vaginæ. I do not approve, as a rule, of the principle of leverage. And that is why so many physicians fail in the use of Hodge's pessary; the leverage is too great. The pressure is so great in using this leverage that abrasion occurs, and laceration and cutting through the tissues. Pessaries should never be fitted in such a way as to produce abrasion, laceration or cutting through the tissues They should not press hard; they should distend the vagina to its normal length, especially, not its normal breadth, and this can be done without much pressure where the uterus is placed so that the fundus falls forward so as to be in front of the transverse axis of the uterus at the junction of the cervix with the body. If it is thoroughly replaced, then you do not get much pressure when you introduce the pessary. It requires little force to hold the cervix back, and I believe in the majority of cases that here is where the general practitioner fails, viz.: In getting the fundus thoroughly forward, and uterus replaced. Many times it is half raised up and the pessary presses against the body of the uterus so hard that it will imbed its whole thickness in the body of the uterus, producing inflammation.

I have frequently held the sound in the uterus and held the organ up thoroughly anteverted, or thoroughly at right angles with the vagina and introduced the pessary over the sound so as to secure thorough replacement of the uterus. I believe in the use of the pessary not only as a support to the uterus, but as a splint to the vagina, for if the vagina is kept in its normal position the uterus will necessarily be kept in its natural position. The ideal pessary, in my opinion, is the pessary of Hodge. Emmet's pessary will fit more vaginas than Hodge's or Smith's, the latter differing from Hodge's in that its vulvar extremity is narrow instead of broad, Hodge's is broad, while Smith's and Emmett's are both narrow at the lower extremity, and are supported by the walls of the vagina. Emmet's is much better than Smith's, is much larger, and therefore much less liable to press too hard upon tissues. The pessary of DR. BYFORD which he has introduced to-night, is the form which I have improvised extemporaneously for myself, and used in several cases. I had six cases where the tissues in the posterior vaginal junction were so sensitive that it was impossible to use

a Hodge, Smith, or Emmett. So I took the ordinary pessary of Hodge or Smith, and bent it in the form of a Byford pessary, and found I could use it where I could not use the others. There is an objection to placing this pressure upon the anterior surface of the cervix with a firm unyielding instrument, and I don't believe that Dr. Byford's pessary will entirely remove that difficulty. He has stated in his paper that there is in a great many cases an absence of the anterior lip of the cervix uteri; there is not sufficient of it to be received on this instrument and to be held; it slips off and down in front of the instrument. This is not the only objection; I have found that while the pressure is brought upon the anterior surface of the cervix by the edges of my instrument, it so interferes with the circulation that the anterior lip will become swollen and œdematous. In his instrument there is no ring for the cervix to become imprisoned upon; this is certainly a thing most to be desired where there is an ulceration or a laceration existing. If the pressure could be divided between the posterior vaginal junction and the anterior surface of the cervix, the œdema would be much less than where the whole uterus was held up by the pessary. These pessaries, Byford's and mine, are certainly very strongly indicated in cases where there is great tenderness in the cul-de sac. A prolapsed ovary with a retroverted uterus may fall down into the cul-de-sac of Douglas and no pressure can be borne there at all, and in such cases the only pessary that can be used with success is one that brings the pressure to bear upon the anterior surface of the cervix uteri.

Dr. Sarah H. Stevenson said, I would like to ask how to treat cases in which the fundus lies high and in which the pressure upon the surface has no effect whatever. Where the fundus is low there is no difficulty. It is very easy to cure that sort of retroversion, but where the fundus is high I do not know how to treat the case.

Dr. Henry T. Byford said in closing this discussion, I think it is wrong to say that pessaries are fitted to the vagina; they may be fitted either to the vagina, uterus, or pelvic floor, or all three. In regard to the bearing of this instrument, it forms almost a semi-circle in which the cervix fits loosely and does not get directly pressed upon. It also makes a good support for a uterus that is not retroverted, but which rests on the pelvic floor. I have a case of bilateral laceration with eversion of the third degree, in which after this pessary was applied the extensive ulceration due to friction upon the pelvic floor, got well in three weeks. I have a case of fibroid tumor in which the uterus lay directly across the pelvic, the right horn on a level with the cervix, but which is held about straight by this pessary modified by having one shoulder lifted, thus giving the patient back her former comfort. In regard to Dr. Martin's question—in the case of laceration just mentioned the levator vaginæ portion of the levator ani seem ruptured or relaxed, and leaves a large vaginal outlet, and yet a good-sized instrument is retained. A large instrument is of course required for a large uterus or a relaxed vagina. You can change the position of the fulcrum by changing the curve of the arms. The sleigh pessary if reversed looks very much like this one with the handle cut off, but it would require a change in the curve of the arms, and in the neck, before it could be similarly used. My pessary comes the nearest being a perfect representation of one of Dr. Fitch's instruments, which he devised before he became sick, but has not exhibited until to-night, and which is a modified Courty's. About the operation, I would like to say that my object in employing it is merely to raise the natural tissues, not to build an artificial support or barrier of fanciful shape; not to remove any more tissue than is absolutely necessary, but to draw the tissues together as much as is possible or desirable. What I have tried to do has been to find the directions of the muscular fibres and shorten them a little, and if they have been torn, to reunite them as they were originally. At the same time I have always in mind the gathering up of the loosened connective tissue about the denudation, and I sometimes cut a little deeper at certain points in order to cut into it and make a closer union of tissues.

THE LOCAL USE OF LIQUID ERGOT, NORMAL, IN CHRONIC GONORRHŒA.

BY J. HARVEY CRAIG, M.D., MANSFIELD, OHIO.*

Hearing of the success of Dr. N. V. Speere, of Quincy, Ohio, in the treatment of gonorrhœa with local applications of normal liquid ergot (such as that prepared by Parke, Davis & Co., of Detroit), and realizing the need of some more satisfactory remedy in the treatment of this disease, in its many stages, I resolved to see if the same good results would follow in my own practice, and therefore vowed that the next case of chronic gonorrhœa that came under my care should have the benefit of the experiment. In a day or two the opportunity presented itself.

Case 1.—A young man, a salesman in one of our large manufacturing establishments, had suffered long and suffered much. He had tried all the "patents," "Big G.'s," etc., to be had, and had also received "rational" treatment from one of our regular physicians. All this availed him nothing. After hearing his story, and knowing him to be a young man of tem-

*Secretary of North Central Ohio Medical Association.

perate habits, never indulging in alcoholic stimulants, and observing a proper diet for so long a time, "my heart almost failed me." I concluded his was a very bad case. Nevertheless, I grimly determined to do what I could, recognizing the fact that success is not without effort.

First I introduced a large sized bougie, finding no difficulty in doing so. He complained, however, of pain, as the instrument was passing. After satisfying myself that no stricture was present, I gave him a small vial of normal liquid ergot, instructing him to use for an injection one part of this to four parts of water (distilled), once daily for a week, and at the end of that time (or sooner if he chose) to report progress. Did not see him again for about ten days, at which time he called to report. He very abruptly exclaimed "what the ——— was that you gave me?" I made some evasive reply, as I feared my treatment had proved disastrous in some way. Finally he said: "Well, I spent over $35.00 on this business before I came to you, and this little vial cured me up." He remarked that after the first application he could notice an improvement, and at the end of the fifth day he was entirely free from discharge and pain.

Case 2.—THOS. W., single, cabinet maker, had contracted gonorrhœa about three years ago. Had received rational treatment, but was not benefitted. He came to me for treatment about the last of May, 1886. This was a very obstinate case, but finally yielded to treatment and was discharged cured, July 30, 1886.

Case 9.—JOHN H., a moulder, single, had had gonorrhœa about one year. This case was very much like case one, except that the patient was intemperate. He was kept under treatment for about four weeks, owing to the fact that he would get drunk. This retarded the cure in his case.

Cases three, four, five, six, seven, eight and ten yielded readily to treatment, and were discharged cured within from six to nine days.

Since then I have used it repeatedly and with the same good results. I have a little army here that would, if they knew upon whom to shower their blessings, bless the man that made the experiment of using local applications of normal liquid ergot in chronic gonorrhœa.

We need not, however, confine ourselves to its use in the treatment of chronic gonorrhœa, but can also use it in the acute stage. My experience in its use in the acute stage is not sufficient to warrant me to advocate its use to the exclusion of the usual remedies.

An object in making this report is to place the treatment before the medical profession, for their possible benefit, for I believe this drug to be worthy of special consideration, being confident that its proper use will be the means of helping us out of our embarrassment.

In closing, permit me to state briefly my reasons for using P., D. & Co.'s "liquid ergot normal." It has been represented to me that the manufacturers, having once ascertained the average amount of active principle contained in ergot of good quality, have adopted this as a standard, each parcel of their "liquid ergot normal" is made to conform with this strength, so that the active principles of 16 ounces of such standard ergot will be represented by 16 fluidounces of their finished preparation; that they "have rejected those principles which long experience has demonstrated to provoke undesirable action," and that they "lay particular stress on the value of this liquid for administration hypodermically."

Recognizing the importance of uniformity and purity, I was very ready to make trial of this preparation, rather than the ordinary fluid extract. I was also influenced by my knowledge of the fact that DR. SPEERE had used it with success. I was pleased to find this preparation of ergot miscible with water, and that it made an elegant solution for injection.

JULY, 1886.

TYROTOXICON AND CHOLERA INFANTUM.*

BY V. C. VAUGHEN, M.D., ANN ARBOR, MICH.

I desire to call attention to the great similarity between symptoms of poisoning by tyrotoxicon and those of cholera infantum. I am aware of the fact that the term "cholera infantum" is used by many in referring to almost any summer diarrhœa of children; but restricting the term to the violent choleraic diarrhœa, as is done by SMITH and our best authorities on the subject, we shall find its similarity to poisoning by tyrotoxicon very marked.

The suddenness and violence of the attack, the nausea and vomiting without marked tenderness of the abdomen, the character of the stools, the great thirst, the severe pain in the back of the head, the nervous prostration, and the tendency to deep sleep, are all observed in both. Again, the white, soggy appearance of the mucous membrane of the stomach of the cat corresponds exactly with observations in children after death from cholera infantum. Cholera infantum, as is stated by SMITH, "is a disease of the summer months; and, with exceptional cases, of the cities." Thus, the disease occurs at a time when decomposition of milk takes place most readily. It occurs at places where absolutely fresh milk often cannot be obtained. It is most prevalent among classes of people whose surroundings are most favorable to fermentative changes. It is most certainly fatal at an age when there is the greatest dependence upon milk as a food, and when, on account of the rapid development of

*Read before the Michigan State Board of Health.

intestinal follicles, there is the greatest susceptibility to the action of an irritant poison, and when irritative and nervous fevers are most easily induced. If all these facts be taken into consideration, along with the experiments which have been detailed, and which show the readiness with which the poison can be generated, it will certainly seem at least probable to any one that tyrotoxicon may be a cause of cholera infantum. A little dried milk formed along the seam of a tin pail, or a rubber nipple, tube or nursing bottle not thoroughly cleansed, may be the means of generating in a large quantity of milk, enough of the poison to render it highly harmful to children. The high temperature observed in children with cholera infantum, and which has not been observed in adults poisoned by tyrotoxicon, may be caused by the continued production of the poison in the child's intestine, by the continued administration of milk, and by the greater susceptibility of the sympathetic nervous system in children.

If this causal relation does exist between tyrotoxicon and cholera infantum, a knowledge of it will aid us, not only in the preventive, but in the curative, treatment of the disease. The first thing to do in the treatment of the disease is to absolutely prohibit the further administration of milk, either good or bad, because the fermentation going on in the intestine would simply be fed by the giving of more milk, even if that milk be of unquestionable purity. I would suggest that some meat or rice preparation be used for food, though experience will soon give us valuable information on this point.

A germ which forms a poisonous ptomaine by its growth in milk may be wholly harmless when placed in a meat or rice preparation.

Secondly, mild antacids should be administered, because the poison, so far as our information goes, is produced only in acid solutions. The great value of the chalk mixture in the treatment of the disease is well known.

Thirdly, theoretically at least, the employment of small doses of some disinfectant would be of benefit. I find that there is considerable difference of opinion in the profession as to the use of small doses of calomel in this disease.

Fourthly, the use of opium in some form is consistent with the theory.

And lastly, the administration of stimulants, brandy and ammonia, to counteract the depressing effects of the poison, already formed and absorbed, should be practiced.

All of these, save the first recommendation, have been practiced in the treatment of the disease empirically; but the first—absolute discontinuance of the use of milk—I regard as of prime importance.

Of course, it will be understood that attention to securing fresh air, and to other hygienic measures, is also desirable.

It is altogether probable that an amount of poison which would escape chemical detection, might be sufficient to produce poisonous effects in children.

Correspondence.

THE NEW (?) SKIN DISEASE.

To conclude by the many articles on the "new skin disease," that are published in different medical journals, it seems that this parasitic affection is still prevalent in some of the states, that it is not well understood yet, and that no specific treatment has been discovered to effectually cure this troublesome disease. A few years ago, hardly a family could be found in the part of the country where I reside, wherein not some of the members were affected with this ailment, but at the present time it has ceased to exist here. The treatment that myself and other physicians here adopted was very simple and harmless, still I might call it a specific, as it has never failed us here, to effect a cure in the course of a few days, or within a week.

In the February 1885, number, page 85, of the MEDICAL AGE, I have already stated my treatment for this trouble, but will repeat it here again, hoping that my medical friends will at least give it a trial, and report their success or failure with it.

Sulphuret of potassium, ʒ ii to ʒ iv, dissolved in one pint of water, the weaker or stronger solution to be used according to the age of person and sensitiveness of the skin. The sulph. potass. may be increased to one ounce to the pint of pater in very obstinate cases. The best time to use this lotion is at bedtime. Before applying it wash the parts affected with strong soap-suds, dry, and then merely wet the diseased skin thoroughly with this lotion. Repeat the same procedure the following night, and continue it for a few nights, then stop. Change under-clothes every morning. If this trouble extends over the whole body, I advise patient to apply the lotion only on some parts of it at a time, and the following nights to other parts, and so on. In children I generally commence with a weak lotion and increase the strength of it, if needed and well borne.

In the commencement of the disease or in mild cases, one or two applications are all that are needed to effect a cure. If, as sometimes happens, the lotion when strong, or the skin very sensitive, should cause much irritation, clean lard, cold cream or oxide of zinc ointment will soon relieve this. The only objection that can be made against this lotion is the disagree-

able smell, and even the addition of eau de cologne will not disguise it.

I do not doubt but that the mercurial preparations that are recommended, are quite effectual, but these require great care in using them when a large part of the body is affected with the disease, besides they are more expensive and more troublesome to prepare. In regard to the simple sulphur ointment as recommended by DR. E. F. WILMOT, in the MEDICAL AGE of July 26, we may call it a specific in the common itch or scabies, but in the parasitic affection which occurred here in this part of the state, it has proved to be an entire failure; it has been given a fair trial by the laity in a number of cases.

Lastly, I would remark that I do not think this parasitic affection to be a new disease, as the same ailment was extensively spread among the people in this state during and after the late war, and was called then "army itch," it being supposed that the returning soldiers had imported it. The same treatment I pursue now I followed at that time, and with the same success. No internal treatment is required.

A. CRULL, M. D.

DITTMER'S STORE, MO

So much has been said about the New(?) Skin Disease of late, that it may seem unnecessary for me to say any more. Suffice it to say that I met with it, the "Michigan Itch," about three years ago, and I have always been successful in its treatment where I could get persistence on the part of the patient.

About two years ago a patron of mine, living ten miles east of this place, came into my office and said he would like to know what was the matter with him, as some said it was one thing and some another. After looking at his arm and asking him a few questions I prepared my microscope and punctured one of the vesicles and transferred the contents to a slide. I soon had the satisfaction of showing him a perfect representation of Fig. 93, page 459 of HARTSHORNE'S "Essentials of Practical Medicine," and with the formula on same page, had the satisfaction of soon effecting a cure. He went home and told his neighbors, who were similarly affected, that they had "bugs." Last spring the patient of a doctor in a neighboring village, who was being treated for eczema, was shown an equally good representation, and was cured with the same treatment. The last lived eight miles west.

Thus you see that it was very extensive and very common in the lumber camps, where it had a good hot-bed for its propagation. One engineer, who contracted it a second time after eighteen months of respite, followed my instructions so thoroughly that after a few applications of the above ointment, which I prepare with cosmoline instead of lard, threw his old underclothing into the furnace, and has been free from the disease since.

I order my patients to apply it for three or four nights, wash thoroughly with soft soap, change their underclothing and sheets, which boil well, and repeat if necessary. By following the above and attending to the general health, physicians will have no trouble with the New(?) Skin Disease.

A. J. THOMSON, M. D.

TUSTIN, MICH.

A PRESCRIPTION FOR DELUSIONAL INSANITY.

I wish to offer what I deem an important therapeutical suggestion—a new remedy to be used in connection with hematic hypophosphites in mental and nervous diseases, particularly in melancholia and delusional insanity. It ought to be in use in every asylum, public and private. The basis of insanity is a delusional feeling or impulse, dependent upon morbid organic conditions, and impressing itself on the conduct or character of the person affected by it. What we want, therapeutically, is to get at and remove these morbid conditions of the body which derange the mind.

I give my patient plenty of malt and hypophosphites and use this prescription, which I think might be introduced by some manufacturing chemist to advantage:

℞ Ext. Cocæ erythrox. (P., D. & Co.), gr. j.
" Valerian, gr. j.
" Cannabis indicæ, opt., gr. ½.
Vallet's mass ferri, gr. ij.
Acidi arseniosi, gr. $\frac{1}{40}$.
Strychninæ, gr. $\frac{1}{40}$.
Codeiæ, gr. ¼.

Mas. ft. in capsule or pill No. 1.

Sig.—One in the morning, one at 10 and one at 3 p.m.

This can be made a kind of stand-by with plenty of malt and hypophosphites. In some cases of delusional insanity the cannabis indica and codeiæ are contraindicated, but in a vast number of cases it is a combination which works like a charm.

With this pill the patient may have at night $\frac{1}{120}$ to $\frac{1}{90}$ gr. of hyoscyin hydrobromate to induce sleep if insomnia be present, and with plenty of fresh air and exercise most curable cases will get well, and a much larger proportion than the asylum statistics now show.

EDWARD C. MANN, M.D.

SUNNYSIDE PRIVATE HOSPITAL FOR MENTAL AND NERVOUS DISEASES, BROOKLYN, N.Y., July 21, '86.

[We are informed that MESSRS. PARKE, DAVIS & CO., of this city, have prepared DR. MANN'S formula, one-half the strength predi-

cated above, in pill form, to which the name of "Mann's sedative pill" has been given. Those desirous of testing it will, therefore, be able to obtain the combination in this convenient shape, prepared by a firm whose reputation forbids any doubt as to its reliability.—ED. MED. AGE.]

CROTON OIL ABSORPTION.

The reading of the editorial article on this subject in the AGE of July 26, recalls some experience on the certainty of such absorption. Treating an old lady some years ago for constipation, I found impacted feces apparently in the ascending color. All usual remedies were used thoroughly without avail. The case was becoming desperate. On the suggestion of a non-professional, who claimed to have known of a similar case, croton oil diluted with olive oil was applied with friction over the obstruction, which was soon broken up, and removed by catharsis. I was quite sure the oil had done the job.

Subsequently I was myself attacked with a diarrhœa, when I was away from any house. While waiting on myself, I discovered pustules over the femoral region of one side, and at the same time felt the peculiar sensation in the mouth and throat one has after taking croton oil, and which I had thought came from contact. When my hurry was over, I found the stopper had come out of a vial of croton oil I had carried in my pants' pocket.

EDWIN STEWART, M.D.

MENDON, MICH.

A correspondent of the Weekly Medical Review on his way to Vienna met, at Paris. an Englishman. "You are going to Vienna to study?" said the latter. "Yes." "Well, I want your card, for I am going to America next year and may need a doctor, and I want one who has studied at Vienna." "Why?" "For this reason: The old school give large doses of medicine, homœopaths give small doses, but the Vienna school give none, and that is what suits me." And the correspondent remarks, after he has had a Vienna experience, that the Englishman was about right. PROF. BAMBURGER gives no aconite, in fact no arterial sedative, digitalis as a heart tonic and diuretic, quinine only occasionally, where a high temperature exists which does not at once yield to cold baths or sponging. His frequent use of calomel reminds one of his father's practice, forty years ago. He often devotes an hour and a half to the delineation of a case, and closes with about five minutes talk on its therapeutic management.

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., AUG. 10, 1886.

Editorial.

MEDICINE OF THE FUTURE.

The student of history discovers that while the affairs of men reveal a cyclic movement, they show also that the cycles are themselves invested with a progressive tendency. While history largely repeats itself, we believe it shows that the circles in which it moves move onward—toward a fixed point called perfection, which is visible only to the eye of faith. A retrospect shows that while there have been occasional, if not numerous, relapses, the sum total of progression has more than counterbalanced these, and we have substantial grounds for hoping and believing that we are now in an era which will continue long enough to mark an advance in human affairs to a point beyond our capacity even now to conceive. As far as existing records show, the present is an age of unprecedented activity, and medicine is not excluded from the list of the fields influenced by this activity.

No physician of even ten years' standing as a practitioner, can fail to be struck with the advances which have marked the time which has elapsed since his graduation, and in proportion to his age as a practitioner, is the studious physician's faith in the possibilities of the future. This being the case, there are few, if any, physicians now living, so well qualified to cast the horoscope, as the late DR. FLINT. Inducted into medicine a half a century ago, he was from the very day one of the most assiduous students and closest observers of the intervening period, and if to any one was given the gift of prophecy touching the advances which are to mark the centennial of his graduation, he would, by common consent of the profession, be selected as that man. About a year ago DR. FLINT was elected by the British Medical Association, to deliver before its meeting during the present month the address on medicine—an honor at once flattering to his reputation as a medical scientist and a fitting fraternal recognition by this Association of the mother country, of the American medical profession. But before the date of the meeting arrived, the tongue of him

on whom the distinction was placed, was silenced by the unconquerable foe. The address had, however, been finished before the summons came, and we have the posthumous copy of it before us.

The address assumes that medicine as it is to-day will not remain standing. It argues that while disease is, doubtless, a part of the Divine plan, its successful management enters also into that plan. The discovery of the reflex system of nerves and of the separate functions of different portions of the spinal cord; the study of diseases after the numerical method; the recognition of the self-limitation of certain diseases and knowledge of their natural history; the creation of histology by means of the microscope; the localization of certain of the cerebral functions; the discovery of anæsthesia; the clinical introduction of the ophthalmoscope and laryngoscope; the clinical use of the thermometer; and the revelations respecting the bacterial origin of diseases—these have been the epochal discoveries in medicine during the fifty years which have just closed. Dr. Flint predicts that the epochs which shall mark the fifty years on which we have entered, will not be less in number or in importance than those which have been enumerated as having characterized the last half century. What these epochs will be can, of course, only be conjectured, but he anticipates great advances from the employment of the microscope and spectroscope, and predicts that the future achievements of these instruments will be as great in the direction of living tissues as they have been in that of the dead. Analytical chemistry, too, will penetrate dark places which histology cannot reach. How is it that secretions, excretions, nutrition, growth, and certain morbid products are brought about? Existing knowledge does not qualify us to answer, and organic chemistry must reveal the secret.

Dr. Flint anticipates great results from the application of the telegraph, the telephone, the microphone and the phonograph in medicine. By their aid intra-thoracic sounds, and sounds accompanying the operation of vital forces in health and in disease, elsewhere in the body, will be so intensified as to make them of practical value, and not only will they be more distinctly transmitted than by the means now at command, but distance from the patient will interpose no obstacle to the physician's examination. "The sounds they make" will form an element in diagnosis, the importance of which is now but faintly conceived of.

Dr. Flint, it will be recalled, was greatly given to expectancy in therapeutics, believing in the self-limited nature of most diseases. He surprised the profession by expressing a faith in the intrinsic tendency of even phthisis, to recovery, and he predicts that the correctness of his views in this direction will, before many years, be generally acknowledged. If this be so, how important will be the fact in judging of the agency of medicinal, climatic, and hygienic measures in the treatment of disease!

As indicating his belief in the cyclic progress of medicine, he predicts that blood-letting, which the late Dr. Gross referred to as a lost art in medicine, will again come to be held as an important therapeutic measure. While to-day no physician carries with him a lancet for venesection, before the expiration of the current half-century no practitioner will go unprovided with the means for this therapeutic measure. Physicians will take advantage of the promptness and efficiency of its effect, and will observe a proper conservatism as regards its potency for harm as well as good. No agent which is not potent for harm is vested with much power for good.

The crowning epoch in the last half century of medicine, Dr. Flint holds to be the bacterial etiology, and one of the brightest achievements of the future will be its intelligent application to prophylactic and therapeutic medicine. It is but a question of time, he believes, as to the discovery of specific organisms for all the infectious diseases, and when each organism will be as fully under control as that which is the cause of malarial fever now is.

The instruments of precision already invented, to say nothing of others which, doubtless, will be invented in the near future, will illumine the dark spots in the physiology of the various organs. The spleen, for instance, has been a *terra incognita*, and the liver, that great scape-goat, is but imperfectly understood as to its functions. Within fifty years the term "biliousness," which has been handed down from Hippocrates and Galen, will, in all probability have a meaning, instead of, as now, being a cloak for ignorance. Of the chylopoietic and hemapoietic systems absolutely nothing is now known, and patients now die of derangements of these while we now look on powerless, because of our ignorance to lend the least relief. Here is a vast field for clinical and physiological research, and none has in it the promise and potency for more good. The near future will witness its cultivation. Leucocythæmia, Hodgkin's disease, Addison's disease, and pernicious anæmia, now opprobria of medicine will, doubtless, in the medicine of fifty years hence, be understood.

Having thus indicated the advances which will become part of the medicine of the future, Dr. Flint devotes a part of his address to the ideal physician of the future. He will, it is presumed, be a better practitioner than the physician of to-day. His practice will exemplify more knowledge of pathology and etiology, together with advancement in therapeutics and prophylaxis. He will, perhaps, be no

better appreciated, but there will be a truer estimate of medical knowledge and of the medical profession. It is a pleasant thought, to the author, that hereafter the practice of medicine may not be so closely interwoven, as hitherto, in the popular mind, with the use of drugs. The time may come when the visit of the physician will not as a matter of course involve the coöperation of the pharmacist, when the medical prescription will be divested of all mystery and have no force in the way of fortifying the confidence of the patient, and when a system of practice which assumes to substitute medical dynamics for the *vis medicatrix naturæ*, will have been added to the list of by-gone medical illusions.

Touching specialists, Dr. Flint believes that the existing tendency to this multiplication will continue, but unless it is properly regulated it will tend to professional demoralization. A medical specialist should not thereby, in his sentiments and conduct, be any less a physician; the honor, dignity, and usefulness of the profession, as a whole, should be as sacred in his estimation as if he were not a specialist. If the effect of specialism be otherwise, alas for the medical profession of the future, as regards the respect of others and the self-respect of its members.

The address on the whole is able and full of thought, as was to have been expected from its authorship, and if the progress be along the lines which it indicates, there are those now living who will witness a usefulness and elevation of medicine, beyond the capacity of those who use the profession as a muck-rake, to conceive. So mote it be.

BOILED AND UNBOILED MILK.

The inability, or the disinclination, of the modern woman to supply to her young its natural pabulum, is the most fruitful cause of the high percentage of mortality in infants under two years of age. The ingenuity of man has united with his knowledge of physiology and chemistry, to supply a substitute for the natural secretion, and we have in the market a large variety of artificial foods for infants. While some of these are tolerably successful, few, if any, are equal to the milk of the cow, which, with slight modification, and with proper care in its preservation, may be made to quite closely conform to human milk. In spite, however, of the most scrupulous care, raw milk is frequently found to be illy borne. Recent experiments by Dr. Reichmann (Deutsch Med. Zeitung) seem to show that by boiling the milk these difficulties may be obviated. The following are the formulated results of these experiments:

1. Boiled milk leaves the healthy stomach more rapidly than an equal quantity of unboiled milk.
2. The digestion of boiled milk is more rapidly accomplished than that of unboiled milk.
3. The coagulation of unboiled milk in the stomach is complete in five minutes.
4. The coagulation is not caused by the acid of the gastric juice, but by the influence of a special ferment (milk-curdling ferment).
5. The acidity of the gastric juice is at first due almost solely to lactic acid, and, later in the process of digestion, to the presence of hydrochloric acid.
6. Hydrochloric acid first appears in perceptible amount forty-five minutes after the ingestion of half-a-pint of milk.
7. For the first hour and a quarter after the ingestion of milk the acidity gradually increases and then decreases until the milk has entirely left the stomach.
8. The curds of casein, in digestion of boiled milk, are much softer than in the case of uncooked milk.

Notes.

To a gentleman from this city, who recently visited Georgia, Dr. R. H. Hightower, of Dublin, in that State, and well known to the profession of the south, made some complimentary remarks anent the Age. "You may tell the editor," he said, "that he may put me on his list as a life subscriber. I purpose taking his journal as long as I live to practice medicine, if it is published so long. I hope it will be, for I get out of it every month more value than I pay for the entire year." Thank you, doctor; and your compliment is all the more appreciated from the fact that it complements numerous others, of a like kind, coming from other sections of our great country. Nothing so cheers the jaded editor as a knowledge of the fact that his work is appreciated by those qualified to pass judgment.

The snake which has so often found a lodgement in the patient's stomach, has once more been expelled. The expulsion occurred in Detroit this time, and the doctor who effected it has managed to get his name, street and number in the papers, in connection with this triumph of his art. Glycerin, chloroform and croton oil were the agents sent in after the reptile, which had the appearance of a water-snake, was two feet long, and had been in the woman's stomach for several years! Some men will do almost anything to get their names in print, but it is scarcely credible that an intelligent newspaper will print such stuff as the above.

A fight has for some time been waging between the medical departments of Laval and Victoria Universities, in Canada, and the prospect of an amicable settlement seems to be somewhat vague. Under these circumstances it has been decided to refer the matter to the Pope! and representatives from each of the warring factions have gone to Rome for that purpose. An appeal to the Pope in medical matters seems like a reversion to times generally supposed to be buried deep in the past. Instances of a reversion to the original type are, however, recognized in the process of evolution, but they grow rarer and rarer with the lapse of time. Fancy an appeal to the Pope by a medical college in this country!

The encouragement for Chinese doctors to try anything new, is not flattering. When a patient dies in the hands of a physician who has departed in his treatment from established forms, he is tried under the statute for accidental homicides, and is debarred from further practicing his profession, provided the injury done has been unintentional. If, however, it shall appear that he has practiced deceit in connection with a case, to gain property, he is treated as a thief, and if death shall ensue from such deceitful practice, he shall be beheaded. What a time the Lord High Executioner would have with his snicker-see, were a similar statute to exist in this country!

Our staid contemporaries, the Medical Record and the Medical and Surgical Reporter, models of eastern propriety in things medical and medico-ethical, are having a little quarrel in which language is being used which might be quite excusable out in the wild west, but which ill comports with the high tone of your medical journal east of the Alleghanies. The Record is tantalizing and irritating in its terms, and the Journal uses such language as is wont to be used by him who loses his temper. You may continue your little dispute, brothers, but remember, it behooves the culture of the east to be strictly parliamentary in its expressions.

N. B. Personalities are unparliamentary.

Dr. I. N. Love, of the Weekly Medical Review, has been elected President of the Mississippi Valley Medical Association. The Association has our congratulations. The doctor is scientific as well as voluble, and when the Association meets next year, at Crab Orchard Springs, Ky., it should give a banquet, if for no other reason than to give the doctor an opportunity to serve as toast-master. He is a host in himself, in this capacity, and those of the editorial fraternity who sat under his spell at St. Louis, last May, would, we are convinced, like nothing better than to sit under it once again.

A Chicago correspondent of the Medical Press of western New York, writes good things of the profession of the wicked city. It has, he says, developed beyond the stage of personal gain, and reached that of public benefit. Physicians there talk less of the number of prescriptions they write than of the anomalous conditions they meet. We are pleased to note this evidence of progress out west, and have no doubt that before many years the profession of Chicago will have advanced even as far as the plane the profession of Detroit now occupies. The over-grown boy is beginning to show signs of virility.

The Ohio Medical Journal is the name of the latest aspirant for professional support, laid on our table. It is a monthly, contains 24 pages of matter, and is furnished at $2.00 a year. It starts out under exceptionally favorable circumstances. Although the first number is just issued, it has a *bona fide* circulation of 5,000, to which it is rapidly adding. There are very many medical journals which furnish more than this one for the money, and have been before the profession for a dozen or more years, and have less than one-fifth of its circulation. Ohio is evidently a good State to publish a medical journal in.

The appearance of half a dozen cases of varioloid (some of them quite apocryphal) has sufficed, with the aid of an enterprising press, to throw the people of this city into a state of decidedly feverish anxiety. If half the number of deaths occurred from small-pox each month as occurs from consumption, the excitement would develop into a panic. It seems strange that a disease infinitely more amenable to prophylaxis than consumption, and the deaths from which are but as a drop to the bucketful when compared with the mortality of the latter, should create such consternation on its appearance.

In Siam, according to Dr. Sturge (American Practitioner and News), who has just returned from there, a spirit doctor is called in in cases of dystocia, and standing over the patient he brandishes a large knife in each hand, and shouts, during each pain. This is done to scare the evil spirit which is supposed to interfere with the parturition. After maternity the Siamese also keep their women lying on a hard plank for thirty days, in front of a large fire, until the flesh is scorched. Truly these women bring forth in sorrow.

"Keep cool, Governor. Don't stew and fret over the unavoidable. The delay will only stimulate our appetites." This was President Cleveland's advice to Governor Hill, of New York, at the bi-centennial cele-

bration recently, at Albany, when the Governor was annoyed at the delay in serving the banquet. The President thus demonstrates himself both a philosopher and a hygienist. His advice followed by all classes and conditions of men, would soon convert this howling wilderness into a blooming garden.

Dr. W. O. Roberts is in Europe taking notes, some of which he is printing in the form of interesting letters to the American Practitioner and News. They handle women differently in the German clinics than in this country. The doctor says, "these hospital people clearly have no regard whatever for womanly modesty, and sometimes I doubt whether the women themselves possess any. I confess I came away with a decided sense of disgust at the coarseness of things."

The contest seems to be between kava kava and pichi, which shall be regarded as the better remedy for gonorrhœa. The latter seems to be receiving the most and best testimonials to its efficacy. Did it ever occur to the reader that a very large proportion of the drugs of more recent introduction are intended more especially for affections of the genito-urinary apparatus? What is the cause of this disproportionate direction?

The announcement is made, in the Lancet, that Dr. B. Falk has been appointed Extraordinary Professor of State Medicine in Berlin. It seems to be a distinguished honor to be an extraordinary professor, in European colleges. Such a title is not held very high in this country. We know of colleges in which, with two or three possible exceptions, the staffs are made up of extraordinary professors, and they do some extraordinary work, too.

The Georgia Eclectic Medical Journal still clings to the belief that the eclectics will be permitted representation in the International Medical Congress, next year. The delusion is sufficiently fixed to justify a suspicion of our friend's mental integrity. No, no, eclectic brother, you cannot be a member of the Congress. Your position on the Code is too off to permit it.

The annual college announcements have already commenced to circulate. We have received quite a number of them, and find that they show little, if any, improvement in this kind of architecture over previous years. There is a tedious sameness in their construction. Some of them are, however, printed on better paper this year than last. This shows prosperity.

The physician having the most lucrative practice in the city of Toronto, Canada, has an income of but $5,000 a year. This will be a surprise to those who know anything of the better means of making collections in Canada as compared with those in this country. But the fact is there, and as the physician certifies to it in his income return, as required by law, there can, of course, be no doubt about it.

The Medical Summary New York correspondent says: "It is a mistake to suppose that New York physicians are loafers. They are workers—every time." We congratulate the profession of the great city, in thus having justice done them. It was long-delayed, but its high source will compensate for a good deal of the tardiness.

Sickness is plentiful in India, fees are high, and doctors are few. This is the report of an Indian correspondent of an Austrian journal. In anticipation of the deluge of letters which our reproduction of this bit of news will bring to our table, we would state that we do not know the most direct route to India, nor are we posted as to the cost of transportation.

Pasteur has recently been decorated with the medal of the French Humane Society, in recognition of his services to humanity.

Companions in arms—twins.

Book Notices.

Diseases of the Stomach and Intestines. A Manual of Clinical Therapeutics for the Student and Practitioner. By Prof. Dujardin-Beaumetz, Physician to the Cochin Hospital; Member of the Academy of Medicine, and of the Council of Hygiene and Salubrity of the Seine; Editor in-Chief of the Bulletin Général de Therapeutique, etc. Translated from the Fourth French Edition by E. P. Hurd, M. D., President of the Essex North District Medical Society; Member of the Massachusetts Medical Society, and of the Climatological Society, etc. With Illustrations and Chromo-lithographs.

Hand-Book of Practical Medicine. By Dr. Hermann Eichhorst, Professor of Special Pathology and Therapeutics, and Director of the University Medical Clinic in Zurich. Volume II. Diseases of the Digestive, Urinary, and Sexual Apparatus. One hundred and six Wood Engravings.

The Genuine Works of Hippocrates. Translated from the Greek, with a Preliminary Discourse and Annotations. By Francis Adams, LL. D., Surgeon. In two volumes. Vol. II.

The above three volumes are, respectively, the May, June, and July volumes of Wood's Library of Standard Medical Authors for 1886. The first is from the pen of one of the foremost therapeutists of the present times, one whose writings show profound knowledge of vital processes and the physiological action of drugs,

and whose system involves an adaptation of these in the treatment of disease. If the term "physiological therapeutist" be permissible in the present stage of our medical knowledge, it is, probably, as fitting to DUJARDIN-BEAUMETZ as to any modern writer. The profession are familiar with his writings through the publication by MR. GEO. S. DAVIS, of this city, of the volume on "Clinical Therapeutics," of which that now before us may be considered a continuation.

The subject is treated in the forms of lectures, of which twenty-five are given. The etiology of stomachic and intestinal diseases is exceedingly complex, and it requires great care, with an intimate knowledge of the physiology of the intestinal tract, to determine it. The author, in a natural and pleasing style, furnishes such aids as are rarely found in treatises on this subject. The chapters on aliments and the powers of the digestive system to properly dispose of the various kinds, are especially instructive, and not less so is that on regimen, in which exercise, its utility and varieties are discussed in the relations to hygiene and therapeutics.

The work is a valuable contribution to medical literature. The translation is excellent, a close scrutiny failing to reveal any of the stiffness which is very apt to be found in converting the idioms of the foreign tongue into terms of the vernacular.

EICHHORST on Practical Medicine, and, The Works of Hippocrates, were noticed on the appearance of the first volumes thereof.

A MANUAL OF DIETETICS. By J. Milner Fothergill, M.D., Edin., Physician to the City of London Hospital for Diseases of the Chest (Victoria Park). Hon. M.D. Rush Medical College, Chicago, Ill., Foreign Associate Fellow of the College of Physicians, Philadelphia. 8vo, extra muslin. 255 pages. Price, $2.50
New York: Wm. Wood & Co.
Detroit: John MacFarlane.

The influence of the various foods in health and in disease is becoming recognized more and more with the increasing knowledge of the physiology of digestion and an acquaintance with the disturbances thereof. The careful physician now does not confine his ministrations to the writing of a prescription, but makes scrutiny into his patient's surroundings, his sanitary conditions and his food. In the disturbances of digestion incident to disease the selection of the particular kind of food best adapted to the case in hand is an important part of the medical attendant's duty, and he who carefully and intelligently discharges it finds increased success to attend the exhibition of his prescription. In most systemic affections the power of the digestive apparatus to prepare for assimilation different nutrient principles, is usually impaired. When the digestion and assimilation of these is essential to the well-being of the patient it is necessary to call in the aid of artificial digestion, and this predigestion of foods has become a very important part of the practice of medicine, especially among infants. A knowledge of this artificial digestion is, probably, not general among the profession, the chief reason for the lack being largely, if not chiefly, due to the absence of any practical, readable work on the subject. This hiatus has been supplied by the book now before us, and those who are familiar with DR. FOTHERGILL'S writings will need no assurance that it has been fully and ably supplied. The book opens with a consideration of food and its object. The forms of food and their digestion occupy the second chapter and this is followed by one on the methods of preparing food. Condiments, beverages, stimulants, fluid foods, and artificial digestive agents, have each a chapter devoted to them. The second part of the book is devoted to the foods appropriate to the different periods of life—infancy, adolescence, adult life and old age—and to those best adapted to the various diseases to which man is liable. The whole is in DR. FOTHERGILL'S pleasing style, and lacks none of that thoroughness which he is so well known to incorparate into his writings. We predict for it a large sale. It comes at a time when the want for such a book is long felt, and we cordially commend it to our readers.

MEDICINE OF THE FUTURE. An Address prepared for the Annual Meeting of the British Medical Association in 1886. By Austin Flint (Senior), M. D., LL. D.
New York: D. Appleton & Co.

We have taken occasion elsewhere to give an outline of this address. It remains but to say in this place that the publishers have issued it in the highest style of their art. The letterpress, paper and binding are truly models.

Formulary.

A correspondent of the Medical Times reproduces the following, which are employed at the clinic of DR. GALLARD, for diseases of women, at the Hotel Dieu. DR. GALLARD is the most prominent of the specialists of women's diseases in Paris. So frequent is the demand for these formulæ that the doctor has them printed all ready for use. Even his signature is lithographed.

The following is given in all cases of

METRITIS or in ANÆMIA.

1. ℞ Ferri subcarbonat., 10 grms.
Ext. cinchonæ (soft), 10 grms.
Ext. opii aquos., 1 grm.

M. Divide into one hundred pills. Not to be silvered.

2. Drink iron-water at meals. To be made by putting a few iron nails in common water.

3. Take every week two sulphur baths, or every morning take a shower-bath of fifteen seconds.

4. Take at the noon meal every day a wine-glass of cinchona wine.

5. Take once every week thirty centigrammes of powdered rhubarb at dinner (last evening meal).

FOR UTERINE FIBROMA.

1. ℞. Ext. hyoscyami, 3 grms.
Plumbi iodid., 6 grms.
Adipis, 50 grms.

M. Sig.—Every evening use this pomade by friction on the abdomen.

2. In the morning wash it off with soap and water.

3. Twice a week stop these frictions, and use instead tincture of iodine painted on the abdomen.

4. Take every day a teaspoonful of this solution:

℞ Potassii iodidi, 10 grms.
Aquæ destillatæ, 250 grms.

M.

5. Twice a week take a salt-water bath, and daily use very large vaginal injections of fresh water.

6. Support the viscera with an elastic abdominal belt.

FOR CANCER OF THE UTERUS.

1. ℞. Conii fructus pulveris,
Ext. gentianæ, ää 3 grms.
Ext. opii aquos., 60 centigrms.

Divide into 60 pills.

M. Sig.—Take one every morning.

2. Apply on the belly cataplasms of laudanum, as needed, for pain.

4. Use twice a day an injection of water in which for every pint add a tablespoonful of

℞. Acid. carbolic. (crystals), 10 grms.
Alcoholis, 250 grms. M.

Or else add half a teaspoonful of this: Perchloride of iron (solution Pravaz) at 50°.

In all cases of women also having phthisis the following directions are given:

1. ℞ Sodii arseniatis, 10 centigrms.
Aquæ destillatæ, 25 grms.

M. Sig.—Take a teaspoonful with every meal.

2. Use as a drink an infusion of pectoral flowers, to which add syrup of tolu.

The French infusion of pectoral flowers consists of mallow, coltsfoot, catsfoot, red corn, rose or poppy, guimauve or marshmallow, etc.; and it might be remarked here that while the practice of the French physicians of giving infusions of herbs may seem to us old-fashioned, still it is wonderful to see what relief they often afford to patients.

3. Take every evening, at least two hours after the last meal, a pill containing ten centigrammes of cynoglossum.*

4. Paint every evening one-quarter of the chest with tincture of iodine, in such a way that you do not paint over the same place more than once in four days.

With the above internal treatment, DR. GALLARD uses the usual local applications per speculum, once a week, that are in use by gynæcologists.

FOR VAGINAL CATARRH.

℞ Crystallized carbolic acid, gr. xv.
Subnitrate of bismuth, ʒ iss.
Glycerin, ʒ vi.
Distilled water, ℥ iij.

Tampons saturated with this solution are to be inserted in the vagina. Or:

℞ Salicylic acid, ʒ i.
Subacetate of lead, ʒ ij ß.
Powdered gum arabic, ʒ ijss.

To be used as an insufflation in chronic cases.—(*L' Union Medicale; N. Y. Medical Journal.*)

Medical Progress.

ON THE VALUE OF BORIC ACID IN VARIOUS CONDITIONS OF THE MOUTH.—Boric acid is now officinal, and justly so. It has long been used in various metallurgical and ceramic operations, and more recently its preservative power has been abundantly demonstrated. It is this antiseptic power which gives it its great therapeutic value. It is a very stable compound—one of the most stable of the acids; it is not volatile, and only exerts its action when in solution; fortunately, however, it is soluble in more than one menstruum. Up till now, its chief application has been in connection with modern surgery, where the boric ointment, lint, and lotions all hold a prominent place. There are spheres for usefulness for it, too, in medicine; and one of these is in diseases of the muoth. It is the benefit of its local action we usually wish to gain, for, though sometimes given internally—as in irritable conditions of the bladder—its topical antiseptic effect is more often desired. In connection with its local application in various diseased conditions of the mouth, its solubility in water and glycerin, its

*The pill of cynoglossum used in Europe usually contains opium, to which its therapeutic effects are probably due.—ED. P. M. T.

unirritating character, its comparatively innocuous nature, and its almost tastelessness, are greatly in its favor. More particularly is this the case in treating such conditions in children, whose oral cavities cause them so much annoyance. Speaking generally, boric acid will be found useful in all conditions of the mouth, fauces, pharynx, and nose, where there is any abrasion of the epithelium; whether it be used as a powder, gargle, mouth-wash, pigment, or corrective. More definitely, I may say, it is not contra-indicated in any of the forms of stomatitis, though scarcely severe enough for the graver varieties.

In simple catarrhal stomatitis, a mouth-wash, containing from 10 to 15 grains to the fluid ounce, speedily cures the condition, and exercises the same beneficial influence in the ulcerative form, though there in addition to the rinsing of the mouth, a local application in the form of the powder or pigment, should be made to the individual follicular ulcers. The powder simply consists of finely powdered boric acid, mixed in various proportions with starch; the pigment is a solution of boric acid in glycerine (1 in 4 or 5). In both cases, the addition of chlorate of potassium is advantageous; indeed, I usually combine it, but it is not essential.

Nothing I know of is at once so rapid and so efficient, in the treatment of parasitic stomatitis or thrush, as this remedy. The youngest children do not object to its application, and, occasionally, you have to caution against its too frequent use. The oidium albicans quickly succumbs to its influence. I am well aware of the great value of nitrate of silver, in many of these conditions; but, I am also alive to its extremely disagreeable and persistent taste, and the dislike which precocious children at once take to it. For thrush in children, I especially recommend boric acid, either as a mouth-pigment or as a confection. Honey and sugar have both been condemned, as being inadmissible, in combination, for the treatment of thrush; but, so far as children are concerned, I may say I consider a confection (though made with honey), which has been impregnated with boric acid, gains more by its palatableness than it loses by the tendency of the saccharine matter to further the growth of fungus. The boric acid at once does away with this tendency. Let the pigment be frequently painted with a brush over the patches, never omitting to do it after food has been taken; or, a little of the confection, simply allowed to dissolve in the mouth; and the days of the fungus will soon be ended. I have found boric acid, combined with its salt (borax), markedly beneficial. Borax alone, however, is not nearly so good.

In pharyngitis, and relaxed condition of the throat, a gargle, containing boric acid and glycerin, with either tannic acid or alum in addition, ought not to be forgotten.

Let me allude to another condition, in which I have found combinations of this substance helpful and grateful to the patient. I refer to the condition in which we frequently find the mouth, tongue and teeth in severe cases of typhoid fever. The mouth is hot; the lips dry, cracked, and glued to the sordes-covered teeth by inspissated mucus and saliva; the tongue dry, or even glazed and hard, brown or black, crusted with fœtid fur. Under such circumstances, a pigment, containing boric acid (30 grains), chlorate of potassium (20 grains), lemon juice (5 fluidrachms), and glycerin (3 fluid drachms), yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily becomes detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria; the chlorate of potassium cools and soothes the mucous membrane; the glycerin and lemon-juice moisten the parts, and aid the salivary secretion. I consider this application well worth a trial.

So much for the soft parts; a word in conclusion regarding the teeth. Few medical men, I suppose, have ever given a prescription for a tooth-powder (such a matter is beneath their notice), and the selection of the ingredients for the various powders and pastes in vogue for the purpose of beautifying and cleansing the teeth, is left entirely in the hands of those who certainly should not know better than medical men. I have frequently trespassed on this debatable ground, and recommended a particular dentifrice. In view of the extremely important part the teeth play in the economy of life, I never hesitate occasionally to inquire as to the attention they receive.

A tooth-powder should possess certain characteristics; it should be antiseptic, cooling, agreeable to taste and smell, and have no injurious action on the teeth. After use, it should leave the teeth white, and a sensation of freshness and cleanliness in the mouth. As an antiseptic in this connection, nothing can displace boric acid. For years I have used the following powder, and can recommend it: Boric acid, finely powdered, 40 grains; chlorate of potassium, ʒ ss; powdered guaiacum, 20 grains; prepared chalk, ʒ j; powdered carbonate of magnesia, to ℥ j; otto of roses, half a drop. The boric acid in solution gets between the teeth and the edges of the gums, and there it discharges its antiseptic functions; the chlorate and guaiacum contribute their quota to the benefit of the gums and mucous membrane generally; the chalk is the insoluble powder to detach the particles of tartar which may be present, and the magnesia the more soluble soft powder which cannot harm the softest enamel.

It is only right to say that boroglyceride (Barff) can replace boric acid in almost all the forms of administration I have enumerated; it is efficacious, sightly, and pleasant to the taste. —A. D. Macgregor in *British Med. Journal*, July 10, 1886.

Some of the Therapeutic Effects of Caffeine When Hypodermically Administered.—Dr. John Cochrane, of Lowell, Mass., writes the New York Medical Record that some two years ago, while seeking a preventive of the depressing effects sometimes noted after the administration of morphine, he became interested in the study of caffeine and its therapeutic value, and determined to test the assertion that caffeine increases the force of the heart and arterial tension. "During these two years," he writes, "I noted my cases, and from these notes select the following, because they prove conclusively to me that the above statement is correct:

"Case 1.—A professional gentleman, æt. 43; has suffered constantly during the last 30 years from intermittent fever and chronic rheumatism; he is addicted to the morphine habit, and during the greater part of the last 16 years has been taking from one-fourth of a grain to 25 grains per diem, just as he felt inclined. He has repeatedly tried to give up the drug, and as often failed. During one of these struggles I found him suffering from excessive debility and wretchedness—thirst, anorexia, soreness in back and limbs, headache, eyes dull and pupils small, tongue flabby, dry, tremulous, and like raw beef; heart slow, weak, heaving; pulse 72, weak, and almost imperceptible; respirations, 14, shallow, and interrupted every few moments by a half-gasp, half-sigh, as if the air escaped too quickly, and accompanied by a feeling of want of breath; temperature, 98.8° F. I dissolved one-half of a grain of caffeine in 20 minims of warm water, and injected the solution into his arm. In half an hour the headache, irritability, soreness, dullness of eyes, and wretchedness had disappeared; the respirations were 16, full, deep, and uninterrupted; the heart was strong and steady; pulse, 84, large, strong, and full; temperature, 99.2° F.; the patient expressed his feeling by saying that he felt 'like a well man.' These direct effects lasted between three and four hours. In the afternoon the same quantity of caffeine was injected, and followed by the same effects. There were several ill-effects—excessive thirst, a craving for a renewal of the medicine, and next morning the sites of the injections showed signs of ulceration.

"Experience has led me to put utmost confidence in caffeine as a synergist. The following case illustrates the value of the drug in this respect:

"Case 2.—A professional gentleman, æt. 36, unmarried. Excepting cardiac weakness, caused by a severe and prolonged attack of rheumatic pericarditis sustained six years ago, the patient is in excellent health. But he has a habit of eating according to the mood he is in —sometimes he masticates slowly, and sometimes he 'bolts' his food. This bolting is followed by indigestion and colic. During the 20 months of my attendance he suffered from 56 such attacks. At first I administered morphine alone, at other times dissolved tablets of morphine, atropine, and sodic chlor.; relief from pain followed almost immediately, yet the exhaustion, occasionally amounting to collapse, and the indescribable wretchedness resulting from the remedy would be so great as to require a day's rest. In 1885 I began to use the following combination:

"℞ Pulv. caffeini et
Pulv. morphinæ sulph., ää gr. $\frac{1}{6}$.
Pulv. atropinæ sulph., gr. $\frac{1}{100}$.
Aq. camph., ♏ xx.
"M.

"This was employed more than 20 times, and succeeded in every instance, a second injection being required only on three occasions. Excepting intense thirst, the patient felt relief as quickly and more satisfactorily than by the former combination; the heart beat stronger and steadier, collapse and wretchedness never followed, and in about 20 minutes he would resume his duties, and, what is more satisfactory in his case, his dislike to morphine is intensified on account of the thirst induced. With all my other patients I have succeeded as well, and I take care to order grs. iij. of caffeine, with a seidlitz, to be taken three hours after the injection; this clears the alimentary canal and sustains the nervous system.

"Case 3.—A youth, æt. 18, laborer; general health excellent until rheumatic fever set in. I found the patient prone, helpless, and moaning piteously on account of pain in his joints and the præcordial region. Auscultation revealed peri- and endo-carditis; the pulse was 156, small, weak, and intermittent; respirations, 60, shallow and gasping; temperature, 106° F. Twenty minutes after the injecting the caffeine mixture the patient was helped to place himself where he could lean against several pillows, and then declared himself as feeling 'just splendid.' The pain, irritability, and dyspnœa had disappeared; the heart beat steadily and strongly, the pulse fell to 120, and in 20 minutes more the patient was sound asleep. So greatly was he relieved that he insisted upon having the remedy administered hypodermatically every night throughout his illness.

"I have treated several cases of acute rheumatism since then, and each has been as signally benefitted by this auxiliary, especially when there were no signs of cardiac failure.

"I have repeatedly used this combination in cases of hysteria, of convulsions in infants and children who were teething or suffering from meningeal irritation, etc., with the best results. In acute alcoholic mania, when the heart begins to falter on account of the duration of the insanity and its concomitants, I cannot speak too highly either of its power to stimulate the heart or of its calmative co-operation with morphine, while maintaining the nervous system and so preventing dangerous symptoms.

"Case 4.—Lastly, I will speak of one case more, to show that the patient's feelings and belief have no influence on the therapeutic action of the drug. The patient is an elderly lady who suffers from incidental effects of a traumatic stricture of the bowel. At the time of which I speak she was suffering intense pain. A few minutes before I called she had dismissed a quack, who styled himself 'a metaphysician,' because, after four hour's praying, he had failed to relieve her. To test whether her confidence in the 'regular' treatment was as strong as she claimed, I injected ten drops of pure water. In a few moments she declared herself much easier; in five minutes more she expressed pleasure at the relief she was experiencing. Now, that she really suffered, the vomited matters and pulse showed; but she believed I had injected the caffeine compound as usual, and, as she is sometimes so ill that a repetition of the remedy is required, I told her that she must have a second dose to insure a night's rest. Two minutes after injecting the mixture she said she felt strangely, which feeling merged into giddiness. In five minutes more the pulse had lost its usual intermittency and became stronger and slower, the body grew warmer, intense thirst set in, and the patient soon went to sleep.

"A perusal of the foregoing cases must force any reasonable person to acknowledge that, in a general way they prove that caffeine, or a compound containing caffeine as a synergist, does, indirectly, make the injection of mor-

phine a safe proceeding, and directly 'increases the force of the heart and arterial tension.'"

A NEW "SYSTEM" OF GASTRIC THERAPEUTICS.—One may well listen with respect to the teachings of a physician who has cured over one hundred cases of gastric ulcer. This is what PROF. LEUBE, of Germany, claims to have done (Bull. Gén. de Thérap., January 30, 1886). PROF. LEUBE is a specialist in the department of gastro-enteric pathology. He preaches a gospel of which the three chief points are the need of accurate diagnosis, strict regimen, and copious use of the stomachal siphon. PROF. LEUBE is one of those who have introduced a system into practice, based, like all systems, on the belief that its adoption will cure most cases of the diseases for which it is intended. Already there are establishments in Germany instituted with the sole object of treating gastric disorders according to the *régimes de Leube.*

PROF. LEUBE has had an excellent training in physiological and chemical science, and having devoted himself largely for fifteen years to the subject of digestive disorders, it is not surprising that he should have evolved a "system" that merits some attention.

The therapeutic principles upon which PROF. LEUBE depends are four in number: 1, Dietary regulations; 2, the use of the stomach-tube; 3, the use of hydrochloric acid and pepsin; 4, the use of various other drugs, such as powders, bitters, etc.

Preliminary to all treatment it is considered absolutely essential to make a correct diagnosis of the form of gastric trouble. To facilitate this the stomach-tube is used, and seven hours after a meal that organ is washed out. If there remain any food at this time, it is an evidence of digestive trouble. By using various foods, and then subjecting the stomach to the seven-hour test, a list of most digestible substances is obtained. On the basis of many such experiments LEUBE constructs his different regimens. They are as follows:

Regimen I. Soup (*bouillon*), meat-juice, milk, raw and soft-boiled eggs, unsweetened crackers, and mineral waters. The digestibility of meat solution as compared with light foods, such as calves' brains, rice, and chicken, was shown by many clinical examples as well as by experiments. A few patients, however, through some idiosyncrasy, cannot digest milk or eggs.

The diet above given is suitable for chronic catarrh and gastric ulcer. After it has been persevered in for about ten days, regimen II is introduced; this consists of boiled calves' brains, boiled sweetbreads, boiled chickens, and boiled pigeon. They are digestible in the order given. The chickens must be young, and the skin must not be eaten. Well-boiled soups were also permitted, and for the evening repast soups, with milk, tapioca, beaten eggs, and calves' feet. This regimen, to which may also be added regimen I, gives a considerable variety. Treatment may be commenced with regimen II if the stomach-washings show the inutility of the first. The patient should live upon these regimens for several weeks, or until his digestive powers will take care of them easily. Then he enters upon regimen III.

Regimen III. This consists of regimen II, with the addition of raw or very rare beefsteak. The best way of preparing it is to scrape as much meat from the raw steak as can be removed easily, and heat it up rapidly in a small quantity of fresh butter. Raw ham scraped and cooked in the same manner is also good, strange as it may appear. The ham must be tender. A small amount of mashed potato is allowed, a little bread (not too fresh), and small quantities of tea or coffee with milk.

Regimen IV. Roast chicken, pigeon, venison, partridge, hare, rare roast beef (it is best cold), leg of veal, small fishes, maccaroni, and soup, with milk and rice; a small nmount of butter in some cases. Later on a small quantity of Bordeaux or Rhine wine may be used, but cautiously. Great variety in diet should not be adopted too rapidly.

The number of meals *per diem* and the quantity of food ingested must be carefully regulated with reference to the seven-hour rule, and the conditions and peculiarities of patients. LEUBE finds that at the catamenial period digestion is considerably retarded. It should consequently be aided, or a longer time be allowed for it, and the food should be plain and simple.

Regimen IV should be continued for several weeks, and, if necessary, for months; its conditions should be rigorously adhered to. When it is decided that the patient may return to his habitual diet he is directed to make the change very slowly, and to keep himself informed as to his digestive ability by the use of the washing-out tube in all doubtful cases.

The only stomach affection in which dietetics play a secondary part is that which LEUBE describes as nervous dyspepsia. Patients will, however, do better, even in that malady, to adopt a definite dietary. Regimen IV is recommended, and variety is advised in the use of it for such cases. Condiments may be used if needed, and hydrochloric acid with pepsin. It should be remembered that in treating nervous dyspepsia moral dietetics (*la dietetique morale*) have a preponderating influence.

LEUBE attaches considerable importance to giving the stomach certain periods of complete repose. For instance, he will wash out the stomach seven hours after luncheon, and give no more food until ten o'clock on the following day. At this time, soup and beef-steak are given, and, generally, a stomach-washing in the evening will show that the meal has been digested.

The drugs most used are hydrochloric acid and pepsin, bitters, cundurango, and mineral waters. The acid and pepsin are not given in nervous dyspepsia or in cancer or ulcer. Bitters, including cundurango, are not thought much of, though the drug mentioned is one of the best. Mineral waters are prescribed in very moderate amounts (O ss. daily), and are to be taken slowly upon an empty stomach.—*Med. Record*, July 24, 1886.

THE THERAPEUTIC APPLICATION OF POTASSIUM CHLORIDE.—DR. A. F. PATTEE publishes the following article on this subject, in the Journal of the American Medical Association, July 24, 1886:

NOTHNAGEL and ROSSBACH, in their "Treatise on Materia Medica," say that "therapeutically potassium chloride is not used." We find no mention of its use in the United States Dispensatory, National, or the various works on materia medica. SANDER has recommended its use in epilepsy in place of the potassium of bromide. Opinions vary as to its usefulness in that disease. It has its place, however.

Potassium chloride closely resembles common salt in appearance; it crystallizes in anhydrous centres; permanent in air, soluble in three parts of cold water; has a simple saline taste not as pronounced as common salt.

Formerly it was generally considered that the corresponding salts of potassium and sodium had the same physiological and therapeutical action upon the animal body; and it was a matter of indifference which salt was used. It is now known, however, that this is by no means so, and that important and well-defined distinctions do exist in the two salts.

In the body the potassium chloride is found in the tissues, cells and blood corpuscles, while in the fluids (the serum of the blood, lymph and bile), we find almost exclusively sodium chloride. Arterial blood mixed with a dilute solution of potassium chloride becomes brighter than that mixed with a solution of sodium chloride. Potassium chloride given in 20-grain doses with 15-grain doses of sodium chloride, three times a day after meals, causes an increase in the molecular tissue and red corpuscles, a fact that I myself have proved.

The effect of potassium citras and acetas when introduced into the system, is to cause the excretion of a large amount of sodium chloride in proportion to the amount given. The potassium chloride does not interfere with the normal amount of sodium chloride in the fluids or solids of the body.

That potassium chloride is essentially for the development of the animal tissues is shown by the fact that food which in itself is not sufficiently nutritious, such as over-boiled meat, recovers its properties on the addition of potassium chloride and a small portion of sodium chloride (Binz). Experiments with plants show also how necessary potassium is for cell nutrition.

For many years I have used potassium chloride, and find it a valuable medicine either alone or in combination with other medicines. I have used it in many cases of anæmia after other well-known treatment had failed to do good, with the most happy results. The dose usually given was five grains every three hours in a wine-glass of water. In the commencing stage of cirrhosis of the liver due to alcoholic excess it has apparently been of benefit.

Exudations after inflammation with effusion of lymph, particularly pelvic cellulitis, have quickly disappeared under its use. In glandular enlargements, in my hands it has been of more benefit than calcium chloride or the iodine compounds. In stomatitis of pregnant women or from mercury it is equal to the chlorate. In ovarian neuralgia with nervousness and menstrual headache accompanied with wakefulness, this salt has given better results than the bromide or ammonium chloride. When combined with corrosive sublimate it is one of the best preparations for syphilis. I usually give it as follows:

℞ Potassi chloridi, ʒ ij.
Hydrargyri chlo. corros., gr. i.
Aquæ, ℥ iv.
M.
Sig.—10 to 20 drops every two hours in wine-glass of water.

This preparation I have used almost exclusively in the treatment of syphilis in both its acute and chronic stages, and the result has been most satisfactory. The tincture ferri chloridi is much improved in its therapeutic action when given with potassium chloride.

It is my desire that those of our profession who have not used the potassium chloride may investigate its therapeutic action, of which I can assure them it will verify my statement. The dose will range from 20 grains to 2 drachms in the twenty-four hours, well diluted with water.

"CACUR" (CUCUMIS MYRIOCARPUS?), A KAFFIR EMETIC.—The extensive use of emetics in the treatment of disease by the Kaffirs of South Africa is well known to all dwellers with or travelers among these races. One of their most frequently employed emetics is a green, or yellowish-green fruit known as cacur, cacuo, or small bitter apple. A small quantity of this with some of the leaves and stalks of the plant was recently given to me by MR. J. A. B. BAYLEY, with the statement that the Kaffirs heat the fruit, squirt out the contents into their mouths, and swallow the material thus expelled. In a quarter of an hour, or thereabouts, emesis occurs. Two of the pepoes are so administered in the case of an adult, one in the case of a child. The plant grows largely in gardens as a weed, especially where melons and pumpkins are cultivated. The fruit is caducous, and, as I have mentioned above, is used by the natives when green or yellowish-green. When ripe it is quite yellow. It never spontaneously ruptures as ecballium fruit does. The plant was obviously one of the Cucurbitaceæ, and PROF. OLIVER, of Kew, pronounced the pepo to be almost certainly the fruit of the Cucumis myriocarpus (Naudin)—a green annual growing, according to HARVEY and SONDER (Flora Capensis, ii., 488), on Table Mountain, near Genadenthal (Genadendal), at Buffelfontein, in the districts of Uitenhage and Albany. MR. BAYLEY states that the plant from which the specimen he gave me was obtained grows not only where HARVEY and SONDER mention, but throughout Cape Colony and the Free State generally. This identical specimen came from the midland province. The plant produces fruit very abundantly,—subglobose pepoes, about the size of a large gooseberry, green when unripe, yellow when mature, and beset somewhat sparingly with short soft prickles. Each pepo weighs from 60 to 100 grains, and on section presents three parietal placentæ, with numerous seeds embedded in a soft viscid pulp, which becomes much more fluid when warmed—possibly the object of the heating practised by the Kaffirs. The pulp has a faint cucumber-like odor, and and is decidedly, but not intensely bitter. The rind is soft, and can only be peeled off with considerable difficulty; it, too, is somewhat bitter, but much less so than the pulp. The

testa of the seeds, which are exalbuminous, have a feebly bitter taste; the seed otherwise is tasteless. The plant, apart from the pepoes, seems to be inactive.

To test its action I took, on an empty stomach, 20 grains of the fresh pulp, and in about half an hour felt somewhat nauseated, but was not sick. Four or five hours afterwards I had some griping pains, and two or three hours after this was slightly purged. To a large fasting dog I administered, bruised with water, a pepo weighing 69 grains. No sickness was produced, and the dog seemed generally unaffected. In about eight or nine hours, very watery diarrhœa occurred, which lasted for well on to twenty-four hours, the evacuations being bilious-looking and containing much mucus. Some days later two pepoes, weighing together 118 grains, were administered in a similar manner, and in twenty minutes very free emesis occurred, the dog vomiting several times, the last vomit containing a little blood. Considerable salivation was also produced at the same time. After the vomiting ceased the animal rapidly returned to its normal condition, and no purgation followed.

From these brief notes it will be seen that the action of the drug is that of an emetic and of a cholagogue purgative; purgative in non-emetic doses, and in doses sufficient to produce emesis causing purgation, if sufficient of the active principle had been retained. Its emetic action is probably local.

As to the chemistry of the plant—I had, unfortunately, not sufficient material to make a satisfactory examination, but as far as I went I could find no trace of any alkaloid, the activity seeming to depend upon a bitter neutral principle, readily soluble in water, or in 80 per cent. alcohol. Prof. Dickson has promised to grow the herb in the Botanic Garden, and Mr. Bayley hopes to provide me with a further supply of the fruit next year, so that I may then finish the investigation.—G. A. Atkinson, M. D., in *Edinburgh Med. Jour.*, July, 1886.

Treatment of Stammering.—In the Bulletin de l' Academie Royale de Medicine de Belgique for January, 1886, Dr. Chervin, of Paris, has an interesting article on the etiology and treatment of stammering. His treatment lasts only three weeks.

The first week is devoted to the study of the elements of speech, and to the methodic exercise of respiration. The respiratory rhythm must be established at the outset, and the patient must be taught to breathe and utilize his breath with a view to speaking. There are certain exercises of respiration, in which he teaches the subject how to inspire and how to expire, these acts being preceded by a moment of repose, during which the mouth is kept closed. Expiration is at first utilized in pronouncing the separate sounds, then combined sounds. The vowels are first chosen in the exercises, as they are easier to pronounce than the consonants. These latter are taken up and each carefully studied. When the elements of speech have been perfectly studied, and the difficulties arising in connection with individual consonants have been overcome by special gymnastic exercises, the subject passes to the study of syllables, then words, and, finally, sentences and paragraphs. During the first week the stammerer should abruptly break with his old manner of speaking. Dr. Chervin considers as a powerful aid in this work complete, absolute silence, which he imposes upon his patients during the first week. It is evident that as long as the principles of the method are not sufficiently known to the pupil, and he is not completely broken into their practice, he will not apply them in conversation. This rigorous silence has another effect. It quiets the pupil's mind, and makes him forget all about his stammering.

The second week the pupil regains freedom to speak. The time has arrived for him to apply the principles he has learned. Henceforward he can speak, because he no longer stammers; he restrains himself, and slowly puts into practice the instructions concerning respiration, the regular movements of the tongue and lips, etc.

It is always a surprise to Chervin to see the contortions, the spasms, the hesitations, the most marked repetitions, disappear under his method as if by enchantment. A clear, precise utterance succeeds the former stuttering; speaking will become natural, agreeable and harmonious, when the extreme methodic slowness imposed during the second week will have given way to an easier gait which is to be practised during the last week of the treatment.

The third week is employed in fixing the new habit of speaking with care and method, and in relieving the delivery of all tendency to choking. At the same time a careful study is made of the inflection of the voice.

In fine, Chervin replaces the very marked syllabation of the first days by a steady but slightly accentuated delivery, in which all the syllables are pronounced without precipitation, and, above all, without jerking.

During this last week, Chervin counsels his pupils to imitate persons who speak well; whose delivery, without being of pedantic slowness, is calm and deliberate; in whose voice the inflections are natural and varied; whose sentences, well modelled, both as to breathing and meaning, are easy to understand and pleasant to hear.

But at the expiration of the three weeks it must not be supposed that the pupil is entirely cured; he is like a convalescent, who has still need of care and precautions in order to achieve a complete restoration. Special instructions must be given to him, whereby he may be able to continue the application of the method, and thus indelibly fix the habit of speaking properly.—*New Orleans Medical and Surgical Journal*, July, 1886; *Medical News*, July 24, 1886.

Sixty Cases of Sciatica Treated by Galvanism.—W. E. Steavenson, M. B., M. R. C. P., electrician to Bartholomew's hospital, London, reports the favorable results obtained by the use of galvanism in sciatica. He concludes his report as follows:

The above sixty cases have been more or less under my care. Thirty-seven have been cured; one had a return of sciatica and was cured a second time; eleven improved only; two did not improve; concerning nine, I am uncertain

as to the result; and two are still attending the hospital. Of those that recovered, three cases were cured with one application, two required two applications only, seven cases were galvanized four times each, two were galvanized five times, one case required six times, four cases seven times, five cases eight times, one case nine times, four cases ten times, two cases eleven times, one case twelve times, one case fourteen times, and three patients came fifteen times before they were satisfied that they were cured; one patient escaped my observation and managed to get one or other of the students to galvanize him twenty-five times before I stopped his coming; he had been free from sciatica for several weeks. Of the cases which were not successful, one patient was, after death, discovered to have extensive necrosis of the ischium, with a sequestrum of dead bone. Another, a lady, was at the time suffering from some malposition of the uterus, which was tilted over on to the side in which the pain was felt, and no doubt exercised some pressure on the roots of the nerve. Although in this case the sciatica was not cured, the patient was so much benefited that she was able to get about the house again after eight applications. Before electricity was tried she had been confined to her bed for five weeks. With regard to the second unsuccessful case, I cannot well assign a reason for its non-improvement. The patient was a gentleman who had spent many years in the East Indies, and had suffered from dysentery and ague. He attended and was galvanized eight times, and as he was not then free from pain, he did not care to continue the treatment. He tried several remedies afterwards, with the same unsatisfactory result. Perhaps if he had persevered longer with the galvanism he might have been cured, for several of the hospital patients attended as many as ten or fifteen times before the were quite relieved; but there is more difficulty in obtaining the prolonged and regular attendance of a patient who has to pay for each application than one who gets his treatment gratuitously. The cases included in my list bear out the favorable opinion expressed by DR. STONE, in his recent Lumleian lectures, of the action of electricity in the treatment of sciatica.

SORMANI ON BACTERIOTHERAPY IN PULMONARY PHTHISIS.—At a meeting of the Medico-Chirurgical Society of Pavia, on March 20, PROF. GIUSEPPE SORMANI read a paper on this subject. According to the report (Gazz. degli Ospitali, May 19), the speaker first criticised the theoretical foundation of bacteriotherapy. It will be remembered that bacteriotherapy was the name applied by PROF. CANTANI to the method he introduced of treating pulmonary phthisis by the inhalation of spray containing *bacterium termo*, the microorganism of putrefaction (See London Medical Record, November, 1885.) After showing the unsoundness of the principles upon which this line of practice was based, PROF. SORMANI went on to relate three cases in which the treatment had been rigorously and faithfully carried out, and even for a longer time than was indicated by CANTANI. The result was altogether negative. SORMANI concludes, therefore, that bacteriotherapy is neither a rational nor a practical mode of treatment. He believes, however, that the inhalation of meat-broth spray may in some cases be useful in allaying troublesome cough, difficulty of expectoration, dyspnœa, and other symptoms. On no account, however, should the *bacterium termo* be added, as it is certainly useless, and may do harm.

In the debate that followed the paper, PROF. RIVA also attacked CANTANI'S method. CANTANI'S treatment was based on the supposition that there was a struggle for existence between the *bacterium termo* and the *bacillus tuberculosis*. But the *bacterium termo* subsisted—not on living structures, but on dead matter. Hence, wherever one might send it, it would not attack the living tissue where the tubercle was proliferating. It would merely cause decomposition of the excretions and of dead tissue; and the product of this decomposition, being in the neighborhood of a large absorbent surface, might be taken into the circulation and act hurtfully on the organism generally.

In answer to questions it was stated that in one of the three cases where bacteriotherapy was employed the temperature went up some tenths of a degree. Whether the urea was increased or not was not known —*London Med. Record*.

ERYSIPELAS AS A THERAPEUTIC AGENT.—FEHLEISEN, we believe, was the first to inoculate erysipelas for the purpose of curing certain forms of skin disease, and since that time various facts have been added to show that this affection has an undoubtedly curative effect on certain tumors and affections of the skin.

BIEDERT has recently (Deutsche Medizinal Zeitung, No. 5, 1886,) described a case of sarcomatous tumor of the mouth, in the case of a little girl, for which he was not permitted to operate, and which was sucessfully removed by the inoculation of erysipelas. The sarcoma occupied the left tonsil, and was about as large as a hen's egg when he first saw it. Twenty months later the tumor had invaded the whole posterior portion of the mouth and the anterior portion of the throat, the anterior portion of the floor of the mouth, principally the left half of the tongue, and protruded between the lips as an ulcerated mass. It had also grown into the nasal fossæ and attacked the skeleton of the face, and on the right side the eye was partly closed by a mass of exuberant tissue. On account of the fœtid discharge from the mass great care was taken to place the patient away from the others; and it seems that so much care was used that she was placed in a bed which had been a short time previously used by a patient with erysipelas. Three days after wards she was attacked with this affection, more especially on the exposed ulcerated portion of the face. Though the temperature rose to a great height, BIEDERT did not interfere in the least with the intercurrent affection, hoping that it would have a salutary influence on the sarcomatous tumor. In the six days of the erysipelatous fever the sarcomatous enlargement melted to an astonishing extent. Suffice it to say on the sixteenth day after the erysipelas the tumor had entirely disappeared except a nodule on the tongue, and one in the

cicatrix at the ala of the nose, which were removed. It may be added that tracheotomy was performed when she was admitted to the hospital.—*Journal of the American Medical Association*, July 24, 1886.

PERMANGANATE OF POTASSIUM IN SNAKE BITES.—DR. J. BERGER reports the following case in the St. Louis Medical Journal for July, 1886:

I would respectfully call the attention of the readers of the Journal to the new antidote for snake poison, permanganate potassium. For a full history of the discovery I refer the reader to the Therapeutic Gazette, vol. v., May, 1884. page 212. When I read the article referred to above, it made such an impression on my mind that I determined to give it a test the very first opportunity that offered itself. I did not have to wait long for an opportunity. In August, 1884, I was sitiing on the veranda reading, when I heard my son, Frank, æt. 14, say he was snake-bitten. I at once made a solution of permanganate of potassium, and filled my hypodermic syringe. By the time he had killed the snake and got to where I was, I was ready for business. He was bitten on the thigh by a large copperhead, the fangs entering the flesh about half an inch apart. The wound was bleeding some and had commenced to swell, the swelling having extended in every direction from the bite about an inch, and was causing considerable pain. I introduced the needle of the syringe under the wound and injected 10 minims of the solution, waited a few minutes and repeated the injection. In about fifteen minutes repeated the injection again. After the first injection the swelling all disappeared and the pain ceased as soon as the smarting from the effect of the medicine was over, and the only inconvenience that was ever felt after was a small abscess that formed where the needle was introduced.

There is only one drawback to this remedy, and that is it must be used in a few minutes after the wound is inflicted to be entirely effectual.

I hope this remedy will soon become generally known and adopted as the treatment for snake bites, as it would do away with that unscientific, injurious, death-dealing practice of filling every person full of bad corn-whisky and alcohol, that is bitten by a snake.

SALICYLATE OF IRON IN CHILDREN'S DIARRHŒA WITH OFFENSIVE STOOLS. — DR. BRAITHWAITE, in the British Medical Journal, July 17, 1886, thus advocates the injection of salicylate of iron in that form of diarrhœa in children characterized by exceeding offensiveness of the stools:

It is commonly met with in summer, but is not strictly what is known as infantile diarrhœa, in which disease the stools are sour, but not necessarily fœtid. Probably this form of diarrhœa differs from the diarrhœa of younger infants, in being caused by the growth of the ordinary bacteria of putrefaction. It is not amenable to treatment by any astringent, nor has any alteration of diet much effect upon it.

It may, however, be successfully treated by disinfecting the bowel contents by means of salicylate of iron, as in the following prescription, which is suitable for a child two years of age. Sulphate of iron ℈i ; salicylate of soda ℈i; glycerin ʒ iij , water to three ounces. The iron and the salicylate should be dissolved separately, and the solutions mixed. The color is darker than port wine, and the taste not unpleasant. One teaspoonful must be given every hour, until the stools become well blackened, which happens in about 24 hours ; or a larger dose may be administered at longer intervals. The medicine should then be given every three or four hours, and occasionally a small dose of castor-oil, to clear the bowels well out, and to get the secondary constipating effect of the oil.

I have employed this mode of treatment for many years. It was one result of a long series of microscopic observations upon the action of reagents upon the bacteria found in putrefying animal fluids, which I read before the Leeds and West Riding Medico-Chirurgical Society 11 years ago. The addition of the salicylic acid to the iron I made more recently.

In hospital practice, and among the poor, it is not so successful as it would be if it were possible to remove the child from the family living room, the air of which is usually very impure, and is made worse by the smells incidental to cooking, and the presence of a sink.

NARCEINE IN WHOOPING-COUGH.—At a recent meeting of the Société de Biologie MM. BROWN-SÉQUARD, LABORDE, and D' ARSONVAL united in praising the effects of narceine in whooping-cough and chronic bronchitis with hypersecretion. Narceine, $C_{3}H_{29}NO_{9}$, is one of the alkaloids of opium, but exists in it to a very small amount, at most not over 0.02 per cent. Most investigators agree that in its action upon man it resembles morphine, but is milder and causes no excitement. CLAUDE BERNARD first called attention to it by his assertion that it was a safer and more agreeable drug than morphine, but had about the same sedative and anodyne effects. Narceine was carefully tried by several Philadelphia physicians, some fifteen years ago, and they concluded that it was almost inert, even in doses of from one to five grains. FRONMULLER states that he has given twenty grains with no effect. On the other hand, many Continental physicians (RABUTEAU, BEHIER, DEBOUT, EULENBURG, LINÉ, and LABORDE) have found that in doses of one-half to one grain it causes quietude and sleep.

The testimony heretofore has been so conflicting that doubts have arisen as to whether the same alkaloid has been used. M. LABORDE now says that a very easy test of its purity is to add to the solution a drop of muriatic acid, when a beautiful blue color is produced.

Surprisingly quick results in whooping-cough have been observed by the French physicians above mentioned. The best mode of administration is to make a solution in syrup, so that a teaspoonful represents one centigramme of the drug. This is the minimum dose for children, the average dose being from two and one-

half to five centigrammes. — *Medical Record*, July 17, 1886.

THE TOPICAL APPLICATION OF VIBURNUM PRUNIFOLIUM IN THREATENED ABORTION.—DR. S. S. TODD, in the Kansas City Medical Record for July, in an article on the Treatment of Miscarriages, commends the topical use of viburnum prunifolium.

He says: "Witnessing the good effects of the drug when given by the stomach, I was led a few years since into its use in threatened abortions by introducing into the vagina on cotton a mixture of the fluid extract of the drug with glycerin. The proportions used are one ounce of the fluid extract to two ounces of glycerin. A roll of hygroscopic cotton large enough to fill the vagina, to which a thread for removal has been attached, is properly wetted and introduced by the patient herself, being pushed well back with the finger against or in close proximity to the cervix.

The cotton is not worn during the day, but is inserted in the evening before retiring for the night and removed in the morning. The advantages of using the drug in this manner must be apparent, especially in cases where the provoking cause of uterine contraction is in the neighborhood of the cervical canal, or about the os externum. In this way I have succeeded in two or three cases, which at first sight seemed almost hopeless. In one case the woman had already miscarried four times, at three and four months, and was now in her fourth month, and bleeding profusely. She was placed upon her back for two weeks, and the use of the cotton tampon continued till the close of the fifth month. She was delivered at full time of this, her first living child. Where the case seems to warrant it, a fluid ounce each of fluid extract of viburnum and tincture of opium may be combined with four ounces of glycerin, and used in the manner given.

SALICYLATE OF COCAINE IN ASTHMA.—A comparatively new method of treatment in asthma nervosum has lately been tried by PROFESSOR MOSLER, of Greifswald. It is now well known that cocaine has not only a local action on the sensory nerve-endings, but also a central one, which, at first stimulating to the nerve-centres, may. if the drug be pushed, become sedative or even narcotic. By this peripheral or central effect, it may, therefore, act in such spasmodic diseases as asthma. Early last year, BESCHORNER published two cases of this disease which were much benefited by cocaine. In three cases PROFESSOR MOSLER has obtained excellent results. All these cases occurred in young people of 23 to 25 years of age, and were uncomplicated by any organic heart- or lung-disease. The drug was given subcutaneously, in doses of 0.4 gramme, at the commencement of the attack. The first patient, who had a bad family history as regards lung-disease, and in whom the asthma had lasted 11 years, was relieved after the third injection; two more doses caused abeyance of the attacks (which occurred previously every day) for a fortnight, when the patient was lost sight of. In the second and third cases, the treatment was more rapid in cutting short the attacks, which in the end were postponed for the three or four weeks during which the patients continued under observation. The injections caused, in one case, a slight sense of faintness and the appearance of dark spots before the eyes; but these symp- soon vanished. It is, of course, impossible to draw from these cases any conclusion as to the permanent benefit of the treatment. Extended experience will perhaps show that the drug is only a palliative. It is in the hope of inducing other practitioners to try the treatment that PROFESSOR MOSLER has published the results of his cases.—*London Lancet.*

THE ABSORPTION OF LANOLIN COMBINED WITH MEDICAMENTS.—In a preliminary note in the Russkaia Meditzkina, No. 12, 1886, p. 207, quoted in the London Medical Record, DR. L. K. PAVLOVSKY, of Kharkov, writes that his experiments with Liebreich's lanolin (first in Russia) enables him to arrive at the following conclusions: 1. Narcotic extracts, when combined with lanolin, are absorbed by the skin "very satisfactorily," their pain-relieving action being obtained "with an almost perfect certainty." The dose used was only twice as large as that for internal use. 2. Hydrochlorate of quinine is absorbed also very easily. This statement is based on four cases of intermittent fever in children, where lanolin and quinine inunctions rapidly gave the effect desired. 3. When a lanolin ointment, with iodide of potassium is rubbed in, iodine appears in the urine not sooner than two, four, or six hours after inunction, while LASSAR obtained iodine from the urine some three minutes after friction. 4. In children, lanolin is better absorbed than in adults. 5. Washing the skin with ether considerably facilitates the absorption of lanolin ointments. 6. In general, lanolin is a substance which promises to supercede all other constituents for ointments, and even, in certain cases, to render superfluous the internal use of drugs.

AN ANODYNE FOR USE IN VESICAL IRRITATION.—DR. W. P. COPELAND, of Eufala, Ala., writes:

"In almost every community there are old men who suffer from enlarged prostates, accompanied with a chronic inflammation of the neck of the bladder, rendering them miserable sufferers and a care and anxiety to their friends and families. Having had the professional care of several of this class of cases, and dreading the tendency they so frequently incur by the administration of opium for the relief of pain, I resorted to various washes for injecting the bladder, resulting in my adopting a solution of benzoate of soda, ten grains to one ounce of water, with twenty to thirty drops of the green tincture of gelsemium; this is warmed and injected by the patient through a soft-rubber catheter, whenever the pain is severe, and the catheter withdrawn, leaving the medicine to be voided in twenty or thirty minutes; or where they are not able to pass anything from the bladder, the catheter is reintroduced and the medicine allowed to escape. My experience with this treatment has been so satisfactory

that I cannot refrain from giving it publicly to the profession."—*Med. Record*, July 17, 1886.

SPARTEINE AT HOME.—DR. THOMAS H. BUCKLER writes as follows to the Boston Medical and Surgical Journal of June 30, 1886:

The expensive sparteine lately recommended by GERMAIN SEE for cardiac weakness, is prepared from Scotch broom—spartium scoparium—the *Planta Genista* or emblem of the Plantaganets, which grows in many parts of the thirteen original States, on sterile soil. It was brought over here by the Scotch and English to prevent the washing of gravelly roads and gutters. It should be cut and gathered at this season, and dried like hay. Its active principle is extremely soluble in water, and two ounces of ground or contused stems to a quart of boiling water, a wineglassful for a dose, every eight hours, are equivalent to a grain and a half of the prepared gum used by DR. SEE. This remedy is useful not only in failure of the cardiac ganglia, but as a tonic to the organic and vasomotor nerves in whatever part of the body congestions occur from loss of power in them. I have used this agent in the form of infusion for half a century, and with marked advantage in many cases.—*Medical News*, July 17, 1886.

TREATMENT OF ASTHMA BY CAUTERIZATION OF THE NASAL MUCOUS MEMBRANE.—At a session of the Berlin Society of Internal Medicine, held May 17, 1886, DR. ZUBLINSKI presented a memoir on the subject above stated. The results obtained in his personal practice may be thus summarized:

He had encountered 143 cases of asthma complicated by diseases of the upper air-passages, in which operative treatment directed to the latter disorders was frequently productive of good results in the chief disease. The cases are classified as follows:

Asthma associated with hyperplastic rhinitis, 55 cases ; 8 cured, 3 improved.

21 cases with granular proliferation of the inferior turbinated bone ; 6 cured, 4 improved.

11 with similar lesions of the middle turbinate ; 5 cured, 2 improved.

9 with disease of the septum and 5 with tonsillar hypertrophy ; 2 cured, 1 improved.

28 with various lesions of the pharynx ; 3 cured, 1 improved.—*Jour. des Sociétés Scientifiques.*

GROOVED BOUGIES FOR INTRODUCING MEDICAMENTS IN CHRONIC GONORRHŒA.—CASPER, in the London Medical Record, describes the following method of treating chronic gonorrhœa:

The plan of treatment recommended is the passage of slightly conical nickel-plated bougies, 25 centimetres long, and having six grooves about 1½ millimètres deep, which become shallower towards the extremity of the instrument, and end at five centimètres from the point. The grooves are filled with a paste composed of cacao butter 100 parts; nitrate of silver 1 to 1·5 parts; balsam of copaiba 2 parts. The paste is slowly warmed, and when dissolved is poured into the grooves and allowed to harden. The smooth part of the instrument is rubbed with glycerine before it is introduced. At the temperature of the body, the ointment melts in one minute.

THE ACTION OF PICHI ON CALCULI.—At a recent meeting of the Therapeutical Society, M. LIMOUSIN showed a specimen of pichi, or piché. It was a solanum, to which the Chillians gave that name. It had recently been introduced into France. In its native country it was believed to disintegrate urinary calculi. M. LIMOUSIN prepared a fluid extract of pichi, of which four dessertspoonfuls represented 30 grammes of the plant, the dose generally administered in 24 hours. M. LIMOUSIN believed that piché acted specially on the mucin, which held together the different elements of calculi, and dissolved it and lessened vesical catarrh, in consequence of the resin it contained. M DUJARDIN-BEAUMETZ confirmed this statement.

GUACHAMACA TOXIFERA has been examined by ROBERT (of Strasbourg) with the result of proving, to his own satisfaction at least, that this Central and South American plant is the true source of curare, or Indian arrow-poison. DR. ROBERT in this simply confirms the statement of SCHIFFER, made in 1883. The latter extracted from guachamaca, which is one of the *apocynaceæ*, a very active alkaloidal poison which he called guachamanine, but which, according to his own statements, appeared to be identical with curarine.—*St. Louis Med. and Surg. Jour.*, July, 1886.

THE INTERNAL ADMINISTRATION OF CHRYSAROBIN IN INFANTILE ECZEMA.—STOCQUART (Monatsch. f. prakt. Dermat., Jan., 1886) reports a number of cases of eczema in children, all of which were treated with small doses of chrysarobin, from a thirtieth to a tenth of a grain, or even a grain, being administered daily. The periods of cure did not exceed ten days. Theoretically, the drug is supposed to exercise a constricting action upon the capillaries of the skin.—*N. Y. Med. Jour.*, July 10, 1886.

CASCARA SAGRADA IN DYSPEPSIA.—DR. TSCHELZON (Centrlbl. für die gesammte Therap.) finds that cascara sagrada causes an increased secretion of gastric juice, bile and pancreatic juice, and hence is useful in most forms of dyspepsia.—*Western Druggist*, July, 1886.

IODIDE OF ETHYL is recommended by DR. BARTHOLOW in the treatment of brain syphilis when a prompt action of the iodine is desired.

The Medical Age.

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Original Articles.

THE PROGRESS OF PNEUMATIC DIFFERENTIATION.*

BY HERBERT F. WILLIAMS, M. D., NEW YORK.

In the Medical Record of January 17, 1885, is found the first report of the application of the pneumatic cabinet to diseased conditions of the lungs. This process was called Pneumatic Differentiation, and the description was entirely confined to what, in the perfected instrument shown to-day, is the first act, *i. e.*, producing rarefaction in the cabinet about the patient and compelling him to respire the normal atmosphere. The report contains the history of sixty-two cases treated in this manner, seven of which were given in detail, and five there classed as recoveries further appear in my second paper delivered before the American Climatological Association, and published in the New York Medical Journal, October 3, 1885. Further reference to these cases will be made in a clinical report which I shall have the honor to present to the same Association during the present month. It will show these cases remaining in good health up to January of this year, a space of nearly two years in each case, and without further treatment.

Dr. Houghton, of Chicago, published a report entitled "Pneumatic Therapeutics" in the Journal of the American Medical Association, November 7, 1885. He advanced some new and ingenious theories suggested by the cabinet in relation to the causes of peri- and inter-vesicular deposits, and reports thirty-four cases of various pulmonary affections, twenty-five of which were classed as phthisis in different stages, four of which in the acute stage recovered and ten improved; three did not improve. Dr. Jensen, the same Journal and date, confirms one of these cases as acute catarrhal phthisis recovered.

Dr. E. Tiegel, of New York, in the Journal of the American Medical Association, in the issue of November 28, 1885, discussed the physiological action of the differential pneumatic process on the circulation. His investigations being made before the present form of cabinet was perfected, he necessarily confined his experiments and arguments to the simple act of immersing the patient in rarefied air while breathing the normal air.

The first full description of the cabinet as perfected was give before the Section on Practice of the New York Academy of Medicine, December 15, 1885, by its inventor, Dr. Joseph Ketchum, in a paper entitled "The Physics of Pneumatic Differentiation," published in the Medical Record, January 9, 1886. This was accompanied by a paper from Dr. E. Darwin Judson, Jr., in the same issue entitled "Present Status of the Pneumatic Treatment of Respiratory Diseases," in which he refers to the preceding work in this field, and shows the value and individuality of the cabinet.

In the Boston Medical and Surgical Journal, of July 16, 1885, appears an article from Dr. V. Y. Bowditch, of Boston, entitled "The Treatment of Pulmonary Diseases by means of Pneumatic Differentiation,"

Dr. F. Donaldson, Jr., of Baltimore, in the Maryland Medical Journal, of February 13, 1886, publishes an article entitled "The Pneumatic Cabinet and Pneumatic Differentiation," in which in a postscript he speaks of the cabinet as giving excellent results, and briefly reports two cases. Among other professional publications on the subject, are those of Dr. W. Everett Smith in the Journal of the American Medical Association, November 14, 1886, and the Medical and Surgical Reporter, of Boston, February 20, 1886, and Dr. Houghton in the St. Louis Weekly Medical Review, January 2, 1886. Dr. Sidney A. Fox, of Brooklyn, read a paper before the Kings County Medical Society, February 16, 1886, in which he reported sixty-eight cases of pulmonary diseases treated by pneumatic differentiation. Many other papers have been read before County and State Societies, and are now awaiting publication in the official Journals.

In consultation and correspondence with a large number of physicians, I have found that nearly all have been looking for a method whereby we might topically medicate the lungs. In this process that result has been accomplished. Mr. Ketchum has shown that we can not only carry a medicinal agent into the remotest alveolus, but condense it there.* It now remains for patient, accurate and careful inquiry to decide whether such medication is efficacious and expedient. Have we not here

* Read in the Section on Practice of Medicine at the Thirty-Seventh Annual Meeting of the American Medical Association.

* Medical Record, January 9, 1886, p. 31.

a field of immense breadth, and will it be fair to adopt the pessimistic argument that nature seeks by the expanse of turbinated bone, and the protected glottis to warm and purify the air before it meets the delicate membrane where its physiological purpose is subserved.

To offset the argument that to change the humidity or temperature of the air, or to burden it with foreign matter would seem illogical and impracticable, we have, first, the result of clinical evidence; second, analogy. Our practical experience teaches us that the pulmonary mucous membrane and deeper tissues tolerate invasion without serious disturbance. We know how readily water is absorbed by the lungs in conditions of partial drowning. Effused blood with its various inflammatory products, may not itself occasion disturbance by its physical presence in the deeper pulmonary tissues excepting so far as it excludes air. Nothing that prudence could suggest as a remedial agent could be any more irritating than the decomposed and ichorous discharges that sometimes bathe the inter-pulmonary surfaces. Analogy shows that surgeons have for years been disregarding the physiological function of a part when disease demands interference. The serous membranes and cavities have been invaded and washed with the most irritating agents. Every mucous tract of the body has demonstrated its tolerance of violence. But it may be asked what is the effect where an agent applicable to a diseased pulmonary area is inevitably introduced into areas remaining in health? There is nothing in this question that exclusively applies to this process. Would not many of our surgical operations give doubtful evidence of our mechanical skill if kind nature did not endure, forgive and repair? When the head throbs with fever that is threatening life, do we hesitate to give an agent of the power of quinine in antipyretic doses? For a remote ache or pain is it not sometimes necessary to narcotize the entire nervous system?

Since the days of Sir James Y. Simpson, McDowell and Morton, have we not chilled the inter-pulmonary tissues with chloroform and ether, and though as I believe by so doing we invite congestion, does it deter us when the greater necessity arises?

Again, is there anything ethereal about the pulmonary tissues that prohibits an effort to cleanse and disinfect? Indeed, in some cases it seems as though the process of repair in pulmonary tissue is as rapid as in the scalp or tongue, and perhaps for the same reason. There is a great diversity, or I may better say, confusion in the professional mind as to whether Koch's bacillus is the cause or concomitant of tubercular disease. Certain it is that a few well-known agents are capable of destroying these organisms. It is, moreover, certain that in every case of phthisis in which they are found serious progress has been made or violent symptoms continually threaten.

There must have been a time in the history of a given case, when lung tissue rendered congenial for the lodgment of its bacterian enemy received its first impregnation. Could we ascertain this period? Can we imagine any surer method of extermination than to introduce at the seat of lodgment a well-chosen germicide? Would we care then if the adjacent tissues were sterilized? Indeed, I think I have already demonstrated,* that by the differential pneumatic process it is possible to save healthy lung tissue from tubercular infiltration.

It is then desirable to have in our power a means by which we can medicate the lungs, and with the conviction in my mind that amounts to a certainty, I neither shrink from the possibilities of therapeutic error nor grow discouraged, because in a given case the relation between the extent of disease and a well directed remedy is insurmountable. I have certainly more than once secured results which could only be fully explained consistently with the hypothesis that a thorough and prolonged course of antisepsis had by coincidence, rather than calculation, been instituted at the time when tubercular germ life, though present, had not established an impregnable foothold. When from the contemplation of this hypothesis I refer to the constant progress of scientific inquiry, and especially the recent developments on biological analysis, I desire to record the prediction that at no distant day a system will be developed and adopted, whereby we can certainly sterilize a pulmonary area, and gain the mastery of tubercular disease to a degree hitherto thought chimerical. However remote the hope thus expressed, it surely affords encouragement to those advanced investigators who systematically employ the microscope as an aid to diagnosis. This method will also detect the early manifestations of grave diseases and will fortify our diagnosis against heretofore unanswerable accusations of unwarrantable conclusions.

The pneumatic cabinet as a mechanical device, independent of its ability to convey a remedial agent to diseased pulmonary structure, and condense it, is itself a factor of no small moment as a salutary measure. Its capacity to increase expansion, to thoroughly aerate the blood, and to thereby promote assimilation and functional activity is attested by the uniform experience of those who have observed its effect.

In patients where the correction of faulty frame developments or distortion is retarding health, this may alone confer all the benefit required. In certain conditions of instituted disease, such correction may render cure or im-

* New York Medical Journal, October 3, 1885.

provement possible to the exclusion of remedial influences.

These results, certainly the most obvious, appeal to some investigators as the most important of its accomplishments.

If in the selection of appropriate agents, whether emollient, sedative, germicidal or stimulating, there is a field for discrimination, equal opportunity is afforded for choosing, first, the character of force, and, secondly, the degree. The annals of medicine are replete with the history of cases treated by means of air-chambers, where air at different degrees of density and humidity exerts a therapeutic influence. Drs. Bowditch, and Hudson have well shown the essential distinction between this and all other devices for treating plumonary disease.* Waldenberg's gasometer seems to some to produce essentially the same mechanical effect.

In pointing out the fallacy of such a conclusion I do not mean to imply the inutility of inhaling condensed air or of expiring into rarefied air. For these purposes the Waldenberg condenser is complete and sufficient, for in order to duplicate this by the pneumatic differentiator, it would be necessary to have the patient to stand or sit outside the cabinet and breath into it either at pressure or vacuum. The processes then would be nearly identical.

But as to the operation of the pneumatic cabinet, what are the facts? In the first act, that of immersing the patient in rarefied air, say at two inches fall of the manometer, we remove one-fifteenth of the atmospheric pressure, which is taking away one pound pressure per square inch of the superficial area of the lungs. If, as frequently happens in the progress of phthisis, communicating and healthy bronchi have become occluded by sputum, the imprisoned air must expand, and a corresponding force be brought to bear behind the occluded point. This I have demonstrated before you to-day.

The rarefaction then is allowed to run down to one inch of the manometer or to a safe and prudent degree. Now begins the act of inspiring the normal atmosphere, while immersed in vacuum, which to some seems equivalent to inspiring the condensed air of Waldenberg, but there is not a similarity excepting that of of the force of the weight of the normal atmosphere. The patient's thorax relieved of a part of its burden, the inter-pulmonary molecules of air separated from each other are inviting their fellows from outside, and are ready to assume normal relations when they meet. In other words an aspirating force is created, that compels a circulation of air with its normal quota of oxygen which no prudent amount of direct force could produce in the alveolus. This may be amplified as follows: In the cabinet the atmospheric support of the chest walls being withdrawn, each ultimate cell is expanded, and there the initial energy is developed. This expansion is communicated along the respiratory avenues to the respiring air. Thus each molecule separated from its neighbor by the increased space of its habitation permits the tidal air at normal destiny to penetrate into the enlarged cell.

While in the compressed air method the initial energy is developed in the apparatus and the tidal air is forced down and super-imposed on the cushion of residual air. The inefficiency of compressed air to carry moisture marks a further and important difference.

Second.—Compressing the air about a patient in the cabinet, and allowing him to expire into the normal atmosphere. Here again carelessness may not detect the difference between this and expiring into rarefied air. At a pressure of two inches of the manometer we are exerting a collapsing force about the lungs of one pound per square inch. The patient now makes an expiratory effort into normal air. Should it be thought desirable the pressure can be carried to such a degree that volition cannot prevent the imprisoned air from rushing out through the alveoli, bronchi and trachea, and unlike the act which it is thought to simulate, the initial movement is in the alveolus, for its air is driven and not sucked out.

The third act, viz., that of alternating compression and rarefaction is unique, comprehensive and unapproached by any previous device. Mere respiration can be maintained if necessary independently of volition. Moderately applied, it affords a respiratory assistance which many diseased conditions welcome. It further promotes the condensation of vapor, by increasing the relative difference of atmospheric pressure at inspiration and expiration.

This description may suggest to your minds many conditions in which, if properly applied, the process will be of no uncertain value. Time will not permit me to here record the results attained since my last clinical report. The results of independent investigators in different sections of the country, all substantiate the claims originally published. These physicians are located in many of the larger cities, and several are in sections of the country where climatic influence may demonstrate the cause of failure in certain conditions where climatic advantage had been denied. The report of recovery and improvement are largely in excess of negative results and failures.

As an office instrument as at present applied, the cabinet fully answers the purposes for early conditions or for the occasional relief which irrevocable cases can obtain. For methods of diagnosis one application will frequently so change the physical character of the chest

* Boston Medical and Surgical Journal, July 16, 1886. Medical Record, January 9, 1886.

sounds that that which before treatment was obscure and indefinite can readily be appreciated and classified. Every one must see that in occasional cases the cabinet as at present applied is at an immense disadvantage. This suggests the necessity for the establishment of properly constructed sanitaria where inclement weather cannot interrupt the treatment nor prevent its frequent and, if necessary, prolonged application. In many a case ultimate phthisis primarily induced by delayed resolution of acute disease, be it pneumonia, pleurisy, the essential fevers or the various forms of septicæmia, would have been cheated of its victim if it had been possible to apply this process in the sufferer's sick chamber.

How many times are we called to watch the battle between disease and repair, with our hands tied until the moment when Nature's pure air can be made to freely circulate throughout the lungs for the double purpose of preserving their integrity and ventilating the sluggish blood which has so long been poisoning the nervous centres! The utility of the instrument will be greatly augmented when we can have it placed in the sick chamber of such a case. Several prominent practitioners who cannot afford the time to properly administer this treatment have adopted the practical plan of sending their patients to some younger physician in whom they have confidence and with whom they have made agreeable conditions.

The older practitioner having the larger opportunity for detecting the earliest manifestations of disease, thus insures his patient prompt institution of an efficient and radical treatment at a stage when recovery may be anticipated.

I have been specially devoted to the study and analysis of the pneumatic process for the last three years. My experience, now matured, convinces me not only of its far-reaching power within the therapeutic regions so far developed, but of its promise in fields as yet only suggested. Its use has provoked in many minds rational theories which, as I believe, will employ a generation.

The great mechanical power of the apparatus is apparent to any observer. In ignorant or careless hands it is capable of deadly force. The corollary of power is peril. But perhaps the greater danger is that it may fall into the hands of routinists, who disregarding the necessity of accurate diagnosis may apply it where its use is contraindicated and for the resultant failure condemn it generally.

When it has produced in a given case what may be called the maximum of improvement, whether this is reached by one or one hundred applications, its use should be suspended. An elastic conscience might distort sound judgment so long as the hopeful sufferer proved a source of revenue.

It needs no reflection or argument to suggest the grievous misfortune to humanity if the men who already prey upon the credulous consumptive with no weapons save natural depravity and cunning, shall find in the cabinet a device by which they can impress the imagination and perhaps chance upon an exceptional result. Its potentialities of good and evil alike dedicate this instrument to the profession. It should be our desire and, if opportunity offers, our duty to secure it against the temerity of charlatans or abuse by the avaricious practitioner.

It was with a thorough appreciation of these considerations that the inventor sought the counsel of the late PROF. SAMUEL G. ARMOR who had watched with much enthusiasm the progress of his early experiments. In accordance with his advice, which was later on thoroughly endorsed by PROF. HENRY I. BOWDITCH, of Boston, and other leaders in the profession, an advisory Board of Physicians has been invested with the absolute power of rejecting or accepting any application for the use of these cabinets. This plan has so far restricted the process to absolutely appropriate and trustworthy hands. For the last year of his life, PROF. ARMOR was chairman of this Board and since his decease PROF. ALFRED L. LOOMIS, of New York, has occupied that position. It is designed to add to this Board a representative physician from each of the prominent medical centers of the country whose more accurate knowledge of the physicians residing in his own community will enable him with greater certainty to accept responsibility for them when entrusted with the apparatus.

This cabinet has already increased the sphere of professional activity and benefit, while it becons us to further accomplishments. Surrounded by safeguards which preserve it as a strictly professional instrument, it deserves from us to whom it has been thus entrusted, not only faithful test but unprejudiced recognition of its capacities when established by sound reason and clinical evidence.

At my request reports have been sent me by many of those physicians who are using the cabinet, with expressions of opinion and clinical reports. Having occupied already so much of your time I shall only refer to them generally. Others are preparing papers for their state and county society meetings, and a mass of clinical evidence is being collected which cannot fail to direct attention to this department of pneumotherapy.

DR. C. B. HERRICK, of Troy, N. Y., reports three cases, one of improvement with a gain of twelve pounds, another with a gain of five pounds, and the third a marked improvement from unresolved pneumonia.

DR. W. A. DEWATTEVILLE, of New York,

reports three cases with his conclusions; two of them, both third stage cases, became quiescent, the third was a failure.

DRS. CLASSON and CLARKE, of Albany, New York, send full details of one case in which they confidently expect recovery from acute phthisis, with reference to several others in which the process is giving relief.

DR. R. H. BABCOCK, of Chicago, reports two cases in which improvement is noticed and says, "It is in my opinion a valuable adjunct." "Its influence over cough and expectoration is of such marked benefit as to alone recommend the method," and speaking of the stimulated circulation says, "were this alone and nothing more the result of treatment with the pneumatic cabinet, this were enough to recommend it to the profession."

DR. W. EVERETT SMITH, of Boston, reports a case of incipient consolidation at apices in which he does not hesitate to claim a recovery.

DRS. CUTTS and FERNALD, of Washington, report a case of marked improvement after thirty sittings, with a gain of eight pounds in weight and absence of signs of the previous pulmonary lesion.

DR. E. E. TRUDEAU, of the Cottage Sanitarium at Saranac Lake, New York, says so far as he has gone he can bear testimony to the usefulness of the method in those cases where good might be expected from expansion and improved pulmonary nutrition, but in cases where localized antiseptic treatment is indicated it is less satisfactory. He finds its most brilliant field in cases when contraction of connective tissue, as in chronic phthisis, exists, with mal-nutrition, debility and dyspnœa, also in apical lesion with coincident constitutional disturbance. He also says: "Most patients suffering from incipient or chronic phthisis have shown more or less marked improvement, one case gaining seventeen pounds in weight with an entire disappearance of all moist sounds in the lungs."

DR. J. H. BLANKS, of Meridian, Miss., has sent me a classification of twenty-seven cases, twelve of which were bronchitis, and in which nine recovered, two improved and one did not improve. Two were unresolved pneumonia, with one recovery and one improvement, and thirteen were of phthisis with one recovery, five improvements, four non-improvements and four deaths. The latter were so far advanced that they were unable to walk without assistance, and one received only four treatments. He also sends full details of two cases, one of practical recovery and one of marked improvement.

Doctor, to impecunious Irishman, who is a patient: "Now, sir, I will leave you this medicine to take after each meal." Mike: "And will yez be koind enough to leave the meal, too, docthor?"

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, July 10, 1886.

DR. E. J. DOERING, President, in the chair.

DR. A. D. K. STEELE read a paper on

THE DIFFERENTIAL DIAGNOSIS OF SCROTAL TUMORS.

DR. STEELE, after passing in review the anatomy of the scrotum and contents, and the points in the differential diagnosis of tumors of the scrotum, related a number of cases in which errors in diagnosis had occurred. In one case, hydrocele and cystic testicle had been diagnosticated, and on removal it was found to be a case of scrotal hernia of the omentum—testicle healthy. Portion of omentum removed; patient recovered. In case two, tubercular testicle had been diagnosticated as abscess of testicle. Testicle removed and patient recovered. In case three, DR. STEELE had been called to reduce strangulated hernia in a boy which he found to be hydrocele. In case four, cyst of scrotum had acted as valve in inguinal canal to prevent reduction by taxis of inguinal hernia. In case five, case of inguinal hernia where undescended testicle was found and removed. In case six, strangulated left inguinal hernia, and scrotum occupied by hypertrophy of cord and epididymitis, measuring 18 inches in length and weighing 12 ounces. Cut off and stump tied at right. Rare complication. Patient died of exhaustion. In case seven, multiple cyst of cord. Had been treated by quack for spermatorrhœa. Cyst aspirated. In case eight, tuberculosis of cord had been mistaken for cancer.

DR. CHRISTIAN FENGER agreed with DR. STEELE that gonorrhœa in itself had nothing to do with tuberculosis; that it will not cause local tuberculosis of the epididymis, any more than a trauma will cause local tuberculosis anywhere else in the body. When there is tuberculosis in the body somewhere, and consequently tubercle-bacilli in the current of the blood, then it might be that the local inflammation from gonorrhœal epididymitis, just as extravasation of the blood from a trauma, favors the accumulation of tubercle-bacilli in those places. Occasionally local tuberculosis will commence in an inflamed epididymis, but in a large number of these cases of scrotal tuberculosis there has really been no gonorrhœic epididymitis preceding.

DR. W. T. BELFIELD thought that too much stress had been laid upon the history as a means of differential diagnosis between syphilitic and other enlargements of the testicle; when affirmative, the history is a valuable factor; when negative, the diagnosis must be made without regard to the history. He mentioned a case where there was not only no history of syphilis, but also a nodular enlargement

of the epididymis with but slight increase in the size of the testis—features usually characteristic of tuberculosis; yet the patient's age (31) argued so strongly against tuberculosis that it was determined to try syphilitic remedies before proposing excision; the effect was immediate and complete. Primary tuberculosis of the genital organs is evidently an infection from within—hæmatogenous. The idea of infection through intercourse with a subject of uterine or ovarian tuberculosis, is, of course, fanciful; indeed, very many of these patients are boys just beyond puberty, who rarely have had intercourse. The growth of the tubercle bacilli implies some local or general predisposition of the individual; one factor in this predisposition is evidently found in the conditions developed during the rapid growth of a part. Thus in childhood the epiphyses of long bones frequently afford a nidus for the growth of the parasite, while the rudimentary sexual organs are never affected primarily; but when with puberty the genital organs begin a rapid development, they are especially prone to become the site of the infection.

The tuberculous testicle should be excised, provided the prostate and seminal vesicles are apparently healthy, to remove the chances of further infection. While it is, of course, possible that there may be other and undiscovered foci of infection in various parts of the body—lymphatic glands, lungs or elsewhere—yet castration not only removes one, perhaps the only tuberculous nidus, but especially diminishes the danger of infection of the prostate and seminal vesicles—a necessarily fatal as well as agonizing affection; tuberculosis of the lungs is sometimes arrested by proper climatic and hygienic conditions; but tuberculosis of the prostate never, so far as we know, by either hygienic, medical, or surgical means.

Dr. McArthur had little to say in regard to the differential diagnosis. In regard to scrotal tumors there was a point upon which he would like to have light, viz: whether Dr. Fenger would have the Society believe that tubercular testis is always the result of general tuberculosis; that is, that the tubercular bacilli are brought in the blood to the point where the local inflammation occurs. He had privately asked Dr. Belfield if such were the case, what would be the advantage of an early removal? He had removed a testicle that happened to be a tubercular one. The man was 35 years of age, in apparently robust health, with no evidence of pulmonary or kidney affection. Dr. McArthur advised the removal of the testicle and performed the operation On microscopic examination all the characteristics of tubercular testicle were found; within two months and a half the man died of acute tuberculosis.

Dr. Christian Fenger said that 15 years ago nobody would have thought of extirpating a tuberculous testicle, because we knew that after the abscess has opened and discharged for a long time, such persons, if put under favorable circumstances, given cod-liver oil, sent to the seashore or country, will recover. So far as general tuberculosis resulting from a tuerculous testicle was concerned, only about 25 per cent. of the patients, he thought, would become subject to general tuberculosis. In cases where the miliary tubercles were limited to the testicle, and all other parts of the body not as yet invaded, extirpation should be performed. It is a legitimate operation now, but has become so within the last five years. It of course has to be limited to cases where, so far as we can find out, the tubercle is local in the epididymis. If the tuberculosis has invaded the vas deferens, it is difficult to see what good extirpation of the testicle could do except as a mere local measure. Another point in tuberculosis of the testicle makes us desire if possible to eradicate the local tuberlosis and thereby perhaps prevent the tuberculosis affecting the bladder. The patients are subject to most terrible suffering for a year or two before death when they get tuberculosis of the bladder. He did not think tuberculosis could be called local here, except if it could be transmitted by cohabitation with a woman having tubercles of the uterus. much in the same way as the microbes of gonorrhœa are transferred, and this mode of infection is not proved as yet. The tubercles in the epididymis must originate in the same way as local tuberculosis in the bones, by arresting and accumulation of tubercle bacilli already preëxisting in the general circulation. He did not think it possible that, in the strict sense of the word, any of these tubercles could be called local.

Dr. G. C. Paoli did not claim to be a specialist, but had seen many tumors of the testicles and scrotum. Tumors of the scrotum often arise in connection with diseases of the prostate gland, and with strictures. He had seen tumors of the testicle produced by affections of these organs. Another thing that gives trouble in practice is neuralgia of the testicles, which is very difficult to diagnose because the only symptom we have is the severe pain in the testicle. Another kind of tumor which has not been mentioned is scirrhous, and it is often difficult of diagnosis. Many that have been diagnosticated as scirrhous have been nothing but chronic orchitis. He once saw a testicle extirpated in the belief that it was scirrhous, but it proved to be a case of chronic inflammation of the testicle.

Dr. J. L. Gray read a paper on

THE TREATMENT OF EPILEPSY BY LIGATION OF THE VERTEBRAL ARTERIES,

first proposed by Dr. Brown, of Calcutta, in

1831. Vertebral arteries furnish blood supply of the medulla, pons, cerebellum and posterior third of cerebrum. Real seat of local disease in epilepsy supposed to be in the medulla, especially in the vaso-motor centres and regions related thereto, as convulsive centre described by NOTHNAGEL. Is great irritability of these centres. Attacks of epilepsy due to reflex excitement of these centres. Ligate vertebral arteries and there will be less blood sent to these diseased and hypersensitive centres. Thus is lessened tendency to epileptic seizures. Also, as several branches of the sympathetic nerve must be necessarily ligated at the time the arteries are, this serves to lessen vaso-motor spasm in the medulla. DR. GRAY recommends tying the arteries between the atlas and axis. Operations have been performed in Chicago seven times, with benefit in one case, temporary benefit in two, no benefit in two, fatal result in one, and result not known in remainder. DR. GRAY drew the following conclusions:

1. Ligation of vertebral arteries should take its place as a recognized procedure in cases of epilepsy in those cases where causes of attacks come from region outside of brain.

2. The artery should be tied as high up as possible, and the ligature should include all fibres of the sympathetic nerve accompanying the vessel.

3. When side of brain first invaded by the disease can be determined, the artery of that side should be ligated, and if the lesion be bilateral, both vertebral arteries should be ligated. The operation should be done not as a substitute, but as an aid to other forms of treatment for the cure or relief of epilepsy.

DR. D. R. BROWN, in opening the discussion thanked DR. GRAY for his very able paper so full of interest and scientific importance, and said the case which he reported to the State Medical Society two years ago is now not quite so favorable. Indeed, the child has practically relapsed into the same condition she was at the time of the operation. For two or three months the change for the better in the child's condition was very manifest. In that case the ligation was made at one side, the intention was to have both arteries ligated, but such symptoms of collapse came on that it was deemed unwise to pursue the operation further, and there being so little benefit, the parents refused to have another operation. He thought with DR. GRAY that enough is before us favorable to the operation to recommend it in cases where everything else fails, and he would be disposed to press the operation in those cases where there seems to be some special disorder of the circulation in the medulla. He thought the trouble about the treatment of epilepsy is that we have included under this name a great many diseases; he was sure there are a great many kinds of epilepsy, and he thought we do not know how to differentiate these different kinds, therefore our treatment must be to a great extent imperfect. There seem to be cases of epilepsy that are confined to the medulla. The history of some cases led him to suppose that the medulla is the seat of the disease, and in such cases it seems that the operation might prove a benefit. He did not believe that the circulation is re-established through the circle of Willis nearly so rapidly as DR. GRAY would have us believe. The circle of Willis is made up of minute arteries. In this particular case, there was a manifst and profound impression made upon the area of distribution of the vertebral artery for weeks, and he did not believe the collateral circulation was speedily established. He had no doubt that this operation will do good in some cases, just as any other profound impression will if made upon the nervous system; the cutting and destruction of the connections through the various plexuses is beneficial, so is any extensive counter-irritation. A seton added to other treatment that was only partially successful, sometimes caused a wonderfully better result to follow. He had a case under observation in which the removal of a cicatrix has resulted in wonderful improvement in the patient's condition, whether due to the extensive counter-irritation produced by the operation or removal of cicatrix he did not know. He believed the operation justifiable in cases that resisted the ordinary treatment. He was an earnest advocate of the surgical treatment of epilepsy, the best results he had seen in this disease having followed the use of the surgeon's knife. Quite a number of cases had come under his observation in which the causes of the affection seemed to be in the ovarian region, and surgical interference was followed by better results than from treatment by medicine. He thought the treatment of epilepsy by pills and powders one of the most unsatisfactory things that can be undertaken, and the proportion of cases benefitted by drugs exceedingly small.

DR. CHRISTIAN FENGER asked as to ALEXANDER'S operation, whether he ligated at once on both sides. The first time DR. FENGER ligated an artery the question presented itself if it would not be dangerous to ligate them both at the same time. He ligated the arteries at DR. JEWELL'S request and consequently did not take responsibility for ligating both at once. That question of course presents itself, and is truly interesting to see that the double simultaneous ligation of the vertebral arteries has never given rise to local brain symptoms. On the other hand, when we ligate a common carotid in case of epilepsy, we always have in mind the danger which may exist of emolition, from a local cerebral anæmia, and possibly death in a certain number of cases. The operation on the vertebral arteries is far preferable

to the ligation of the carotid, if it should prove that there is no danger by the ligature of the vessels both at one time. As to the manner of operating, ALEXANDER operated down low, before the artery enters the vertebral canal, but according to DR. JEWELL'S view it is necessary to ligate the vertebral arteries high up. I looked over the books of surgery and found that the method of ligating between the occiput and the atlas, and between the latter and the epistrofus, had been done on the cadaver, but not on living subjects. The reason why the vertebral artery had been ligated in former times was either for aneurism or wounds. There are very few instances on record, and the wounds and aneurisms were very dangerous cases, and FISCHER in the German surgery of BILLROTH and LURCKE, published in 1880, said that the ligature of the vertebral artery between the occiput and atlas and between the atlas and the axis is practically impossible. On the cadaver it can be done as well between the occiput and atlas as the atlas and axis, but the operation is much easier between the atlas and axis. To ligate between the occiput and the atlas I consider almost practically impossibe on the living subject. The ligature between the atlas and the axis can be done; I know that ANDREWS ligated there, but the cases on record are few. There has not as yet been any injury to the artery, but if we should tear the artery so that we could not get hold of vessel enough to ligate above and below, we would have much the same condition as in traumatic aneurism of the artery. WARREN, of Boston, who wrote Memoirs of Surgery twenty years ago, gives one case of wounded artery that got well by compression, by filling up the wound, but in most cases we know now little effective the plugging of an arterial wound is. Of thirty-four wounds of the vertebral artery only five recovered. Four of these were treated by plugging or local applications; in one only the ligature between occiput and atlas was performed by me in 1881, and the case published in Gaillard's Journal, July, 1882. DR. FENGER was afraid, when taking up the vertebral artery, of the possibility of wounding it before it is ligated.

DR. C. W. PURDY asked DR. GRAY whether the operation was followed by diabetes, as would be expected from an operation of that kind. It was pointed out in 1849 by CLAUDE BERNARD, that traumatic injuries to this tract of the brain gives rise to diabetes in numerous instances, and since that time the course of the diabetic influence has been pretty satisfactorily mapped out. It is said to leave the brain by vaso-motor filaments with the vertebral arteries going as far as the third cervical ganglion, passing along with and surrounding the subclavian arteries, and reaching the upper and middle dorsal. A section of these nerves at any place until we reach the upper dorsal ganglion causes diabetes. Strange to say, section of the splanchnics does not cause diabetes, but he would expect to find traumatic diabetes as a result of this operation. He thought that diabetes as a result of the operation would be only temporary.

DR. HAROLD N. MOYER thanked DR. GRAY for the manner in which he had presented the the subject and especially for the indications which he laid down for the operation. DR. MOYER had uniformly bad results from the treatment of epilepsy by any operative procedure. He had never recommended an operation for trephining that was followed by good results. He had once recommended the removal of the ovaries, and it was done, but was not followed by a good result. In one case coming under his observation a man was trephined three times; the first time it was followed by a cessation of the epilepsy for eighteen months; the second, for a year; the last by no cessation. He had found medication quite as bad; he had tried the bromides according to HAMMOND'S method, without good results. During the last two years he had treated about one hundred cases of epilepsy and in only one case had there been any real benefit. He thought he should recommend this operation, and hoped it might not be as serious as one would be led to suppose from the deep seat of the artery, and the extensive destruction of tissue that must be made to reach it.

DR. D. R. BROWER said that at the discussion which followed his paper at Springfield, a gentleman present announced that this operation was first performed in this country sixty years ago by an army surgeon, stationed in St. Louis, upon a negro man who was his servant. The man recovered, but the case was never published. If this is so, an American surgeon was the first to essay the operation.

DR. J. L. GRAY in closing the discussion said that he had not had an opportunity, except in one case, to examine the urine, and in that there was a slight quantity of sugar for about a week. From all the literature he was able to examine the first operation was performed in 1831 by DR. BROWN.

DR. GILLETTE recently reported to the N. Y. Obstetrical Society, a case of vaginitis. with profuse leucorrhœa which was due to the entrance of red ants into the vagina. The woman had been in the habit of using a fountain syringe in which, when not in use, the ants were in the habit of taking up their abode. On using the instrument they were poured into the vagina where they caused irritation by their bites. Microscopists will do well to bear this case in mind when searching for the gonococcus prodigiosus, in cases of vaginal discharge.

Correspondence.

CONSTIPATION—CONVULSIONS—CASCARA CORDIAL.

Believing the following unique case would be of interest to many physicians, I have pleasure in reporting the same for the MEDICAL AGE.

About five months ago there came under my observation a male child of six years, suffering from convulsions, of which he had had several at uncertain intervals. Treatment thus far had proved useless. On diligent inquiry I was able to exclude all other causes but constipation, which had persisted from infancy—from birth, in fact. The father asserted that the child had never in all the six years of his life enjoyed a natural stool, it being always necessary to resort to laxatives, cathartics, or injections.

I immediately administered a mild but prompt cathartic, and soon the convulsions ceased. My reasoning was that there had been an absorption of certain excrementitious products that were acting as an irritant poison to the delicate nerve centres. Not finding indications of organic disease, and recognizing the importance of maintaining a regular action of the bowels by some means closely imitating nature, I decided upon the use of PARKE, DAVIS & Co's., Cascara Cordial. It occurred to me that this preparation was specially indicated. The laxative to be used *must be a tonic.* I had reason to believe that Cascara Cordial would meet the requirements. Accordingly, I prescribed that elegant and efficient elixir—only that and nothing more. I was sanguine of success, having confidence in my diagnosis and in the correctness of the indications. But the result exceeded my anticipations. The child has had no more convulsions. He quickly became "regular;" his appetite became voracious; his cheek assumed the rosy hue of health; his weight increased; in short, he is to-day a robust healthy boy—all done with a few ounces of Cascara Cordial.

It is needless to say I have faith in Cascara Sagrada, when properly selected and prepared.

D. J. BALLARD, M.D.

St. Paul, Ind.

SYRUP TRIFOLIUM CO. IN SYPHILIS.

On June 10th, 1886, I was consulted by a young widower, at about 30 years of age, occupation, car inspector on the railway. He had had a Hunterian chancre some six months previous to my interview with him, and had obstinately refused to be treated until the time he consulted me in June. He was then suffering excruciating pain in the frontal region, also in the legs. He had eight ulcers on left leg and five on right, which varied in size from a 25-cent piece to a silver dollar and were discharging a good deal of pus. The patient was also suffering from laryngitis and had mucous patches in his mouth. Owing to the pain he was unable to sleep.

On taking charge of the case, I prescribed syr. trifol. comp., a teaspoonful four times a day. Before giving the mixture I added ten grains potassium iodide to the ounce of the syrup. I subsequently increased the amount of iodide given by adding another ten grains to the ounce. I used iodoform on the ulcers on the legs, and caustic to the mucous patches in the mouth. The patient improved rapidly for about a month, when his left knee became much swollen and very painful. To this a poultice was applied, and the patient put on the following prescription in addition to the one he was already taking:

℞ Tr. ferri. chlor., ℥ j.
Hyd. chlo. cor., gr. iv.
M. Sig. Take twelve drops in water after meals.

The syrup he was taking before meals.

From this time on he gained wonderfully in weight and appearance, and says he now feels well. Mouth, throat and legs have nothing left but scars to show my patient has had the syphilis. He will continue treatment till I am sure he can safely stop.

In the second case I had almost a precisely similar experience, except that the patient had not quite so severe an attack. He progressed from the time he came under my care till a cure was effected.

I believe the syrup is a good adjunct to the potassium iodide and corrosive sublimate in cases of this nature, through its tonic and alterative properties.

C. R. PONTIUS, M. D.

FREMONT, OHIO.

METRORRHAGIA—NORMAL LIQUID ERGOT.

"When we want a reliable preparation of ergot we want it bad," is an expression I have frequently heard.

The following case will forcibly illustrate this: MRS. A. B., middle age; multipara; metrorrhagia of a few weeks' duration; otherwise healthy. The case was recognized as precarious by the husband. I was called. For personal reasons the medical attendant preferred not to meet me, and quit the case. I found the woman "sick unto death." It was manifest that she could not long survive if the hemorrhage was not speedily controlled. I noticed in the history of the case an indication of periodicity; and observed that the uncertain fluid extracts of ergot commonly found in village drug stores had been the principal remedy employed.

I placed the patient upon quinine and liquid ergot, normal (P., D. & Co.): the latter in doses

of one teaspoonful, but not long continued in that quantity. Within forty-eight hours the hemorrhage had ceased and did not return.

I could not admit that quinine had done this praiseworthy work unassisted by the ergot. That would be contrary to my past experience. On the contrary I am satisfied that this excellent preparation of ergot was the main element in securing this exceedingly fortunate result. I am now of the opinion that the dose was somewhat in excess of what was necessary.

D. J. BALLARD, M.D.

ST. PAUL, IND.

THE NEW (?) SKIN DISEASE.

It strikes me that there has been about enough said in the medical press of this country upon what the writers are please to denominate "The New Skin Disease."

I presume we have the same affection in this part of Missouri, and have had for several years, and it seems to me that about the only striking difference between this affection and the old-fashioned scabies, or "itch," is that in the old the animalcule seemed partial to the locality between the fingers, while in the new that does not seem to be the case. The mother who will take her sulphur ointment and apply it successively three times, at bed time, then wash the "victim" thoroughly and give him "a change of raiment," and be careful to treat his bed and bed-clothing to thorough cleansing, so that any lurking parasite may not escape his just deserts, will be alike successful in curing the itch, as I have no doubt all the writers have been with the many ℞s that have been introduced to their notice. We may talk about eczema impetiginodes and eczema rubrum, and when all our efforts at fine distinctions are exhausted, we find we have substantially one disease, and treat it accordingly. In the "New (?) Skin Disease" we have the "itch" in a new pair of gloves, perhaps, but substantially the old enemy of our school-boy days.

I. M. ABRAHAM.

HARRISONVILLE, MO.

The so-called "New Skin Disease," about which I see so much in your journal of late, has prevailed, at times, both winter and summer, in this portion of Missouri, for the past four years.

During this time I have treated a great number of cases with the following:

℞ Flor. sulph., ʒ i.
Camphor., pulv., gr. v.
Zinc. oxid., ʒ ss.
Acid. crysophanic., gr. x.
Cosmolini (*vel* vaselini), ℥ i.
M. Fl. ung.

I have the patient to wash thoroughly, rubbing the affected parts well with either a sponge or soft rag. Wipe dry, and with the finger rub the ointment in well. Apply in this way night and morning for three to five days, according to progress of recovery, after which I have them repeat the washing. If not well, the same rules are observed until recovery is complete.

I allow no water used on the affected parts, except at time of general bath.

For application to exposed parts—the face, hands, etc.—I omit the crysophanic acid.

The general condition of the patient is looked into, and such internal remedies prescribed as seem indicated.

In some few cases, where the patient was suffering from malarial or other troubles, I have found the affection quite obstinate.

I cannot now recall to mind a single instance of failure. Almost any compound, with sulphur as the principal ingredient, will, I think, succeed. A small proportion of camphor, I have found, aids materially in promptly allaying the itching.

I had not regarded this affection as worth public attention until I find so much about it in your live little journal. The diversity of opinions as to its cause, pathology, and treatment are both perplexing and amusing.

E. A. WAGGENER, M. D.

CARROLLTON, MO.

AN INQUIRY.

These remarks are not intended to be either scientific or instructive, but they may, in proportion to the small space they occupy, be of interest to an idle, speculative mind.

It is a well recognized fact that an impregnated ovum sometimes falls into the cavity of the peritoneum, attaches itself to the serous membrane, draws to itself a supply of nutriment, and undergoes development. Deducing the fact that the development of the ovum does not require the service of an essentially female organ, the following questions propose themselves:

1. Does the stimulus that causes physiological enlargement of the vessels bearing blood to the point of attachment reside in the mother or ovum? Presumably the latter.

2. Is there anything in the nature of the female peritoneum that renders it more fit than its male analogue for furnishing nutriment to an attached ovum? Presumably not.

3. Is there anything about the female system in general that renders it alone capable of supplying this nutriment? Presumably not.

4. If, under favorable circumstances, impregnated ova were to be introduced into the male peritoneal cavity, is it not possible that they might attach themselves and proceed to a viable stage of development? Logically, yes.

5. Could not the young of one animal be thus grafted upon a different species, and prove to an over-credulous world that the nervous influences of a mother are without effect upon the physical development of the progeny?

6. Is this train of reasoning too impractical to afford a basis for instructive investigation? I think not.

B. M. R.

The Medical Age.

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Editorial.

MEDICINE IN THE UNITED STATES.

In his address, delivered before the British Medical Association, on the 11th inst., Dr. John S. Billings, U. S. A., who had been selected to fill the place made vacant by the death of Dr. Austin Flint, takes occasion to lay before our English brethren a picture of the condition of medical affairs this side the Atlantic. The shadows of this picture, he refers to as the overcrowded state of the professional ranks, and the low standard of education, results generally ascribed to the want of legal restrictions as to the qualifications which will give a man the right to practice. He refers to statistics gathered in 1883, which show that in the United States and Canada there were 90,410 persons calling themselves physicians, being in the proportion of one to every six hundred of the population. In Canada alone there were 3,487 physicians, or one to every 1112 of the population. He shows that in this country the distribution of doctors is somewhat irregular as regards the proportion to the population. For instance, in Colorado there are 29.3; in Indiana, 23.2; in Oregon, 24.3; and in Arkansas, 23.5 doctors for every 10,000 of the population; while in New Mexico there are only 6.6; in South Carolina, 9.2; and in North Carolina, 9.7, for every 10,000. He does not attempt to give any reason for these differences, but does not hold local legislation reponsible therefor.

Touching the complaint of the low standard of medical education, he remarks that his observations have convinced him that the education and ability of medical practitioners are, with rare exceptions, of quite as high a standard as the intelligence of the people and their willingness and ability to remunerate for medical services, will justify. He evidently believes in the application of the law of demand and supply in the matter of medical practitioners. He points out as a curious fact, that the ability of the physicians in the different sections of this country may be predicated from the degrees of healthfulness in these different sections. He presents a map in which the degrees of healthfulness are represented by shadings, the darkest shadings representing the sections notoriously the most unhealthful, and maintains that the lowest standard of ability on the part of medical practitioners is found in these. There are, of course, exceptions to this rule. It was, for instance, within the limit of this malarial shadow that the foundation of modern gynæcology was laid by Marion Sims, of abdominal surgery, by McDowell, Battey, and Gross, and of an important part of the physiology of the nervous system, by Campbell. Nevertheless, he maintains that the rule holds good that malaria and science are antagonistic. The exceptions prove the rule.

Dr. Billings rather discountenances the attempt to fix a standard of medical education through penal or restrictive legislation, holding that any attempt to fix a standard of requirement or qualification for practice which shall be the same for rural districts and for large cities, must result in the adoption of what competent judges would consider so low a standard as to be ridiculous and useless. The demands are widely different, and corresponding differences exist in the source of supply; that is, in the medical schools. He very wisely maintains that "all efficacious legislation must be substantially in accord with public opinion, since it is impossible to continue to punish for any length of time that which public opinion does not condemn; and as the great mass of the people of the United States have not as yet had such evidence as they can understand, and which would thoroughly convince them that it is to their interest to suppress quackery, it follows that it is necessary to go slowly and to allow such evidence to accumulate."

The address follows with a synopsis of the laws existing in the several States, which have undertaken to regulate the practice of medicine, and apparently yields to those of Illinois the palm of superiority. Under these laws, it says, "anyone who presents a diploma, or license to practice, from a legally chartered medical institution of good standing, is entitled to practice, and the State board of health is to decide as to what shall constitute 'good standing.' The board of health also examines all persons who do not possess satisfactory diplomas, and who, nevertheless, wish to practice in this State.

"One of the greatest practical difficulties in the way of providing any system of State examinations in medicine in the United States, is that public opinion will not support any law which can be supposed to condemn or in any way to injure homœopathic and eclectic practitioners or their schools, and hence any proposed law relating to medicine, or to the organization of State boards of health, which does not recognize the existence of these sects,

will, in many States, at all events, meet with enough opposition to defeat it. In Illinois this difficulty was surmounted by the arrangement, that of the five physicians on the board, one should be homœopathic and one eclectic. The Kansas law, passed last year, goes further in this direction, and provides that appointments must be so made that no school of medicine shall ever furnish a majority of the members of the board. Much to the surprise of many, the Illinois plan has worked very well—there has been no quarreling on the board—and the homœopathic and eclectic members seem to have upheld quite as high a standard of qualification as their fellow members. The results of the work in Illinois have been very good. A large number of ignorant charlatans were forced to leave the State. The requirements of the board as to what shall constitute a medical college in good standing have been raised, and it has thus caused improvement in the medical schools, not only of Illinois, but of other States. Moreover, the neighboring States have been stimulated to action, not only by the force of example, but because they received the men who had been driven out of Illinois, and found the accession an unpleasant one."

THE DEATH OF DR. FRANK HASTINGS HAMILTON.

The inexorable reaper has laid low another of the great ones in the medical ranks—Dr. Frank Hastings Hamilton. Dr. Hamilton was born on September 10, 1813, in Wilmington, Vermont. He received his literary training at Union College, graduating from that institution in 1830. He forthwith entered upon the study of medicine, and was graduated from the Medical Department of the University of Pennsylvania, three years later, at the early age of twenty years, when he settled at Auburn, N. Y. He soon became distinguished for his ability as a surgeon, and began his career as a teacher by delivering a course of lectures in his office. In 1839 he was chosen to fill a vacancy in the professorship of surgery at the college which then existed at Fairfield, N. Y., and the following year was made professor of surgery in the Geneva Medical College. In 1846 he removed to Buffalo, where he became associated with the late Dr. Austin Flint and James P. White, in the establishment of the medical department of the University of Buffalo, in which institution he remained as professor of surgery until 1858, when he removed to Brooklyn, to take the chair of principles and practice of surgery in the Long Island College Hospital. In 1861 he became one of the founders of Bellevue Hospital Medical College, in which he occupied the chair of surgery until 1875, when he resigned. On the outbreak of the war of the rebellion he became attached as surgeon to the 31st New York regiment, and was successively promoted the grade of Brigade-Surgeon, Corps-Surgeon, and Medical Inspector of the United States Army. His connection with the case of the late President Garfield is well known, and, doubtless, the physical and mental strain then experienced made damaging inroads into his not very robust constitution, for shortly after, in 1883, he was seized with pulmonary hæmorrhage, due to fibroid phthisis, to which he finally succumbed on the 12th inst.

Dr. Hamilton was besides one of the ablest surgeons of his day, a voluminous author, and a man of great genius as an inventor. The work which will add most lustre to his name in his treatise on "Fractures and Dislocations," which is justly regarded as the best work on the subject extant, and which, besides passing through seven editions in this country, has been translated into the German and French. The work, however, in which he himself took most pride is his "Treatise on Principles and Practice of Surgery," published in 1872, since which it has passed through three large editions.

Personally, Dr. Hamilton was one of the most agreeable and companionable of men, brilliant and witty in conversation, and possessed of a heart replete with all those qualities which make a man loved and respected. His memory will remain green with those who were thrown into relations with him sufficiently close to discover the inherent loveliness of his character.

DEATH OF DR. WILLIAM R. CRUICE.

Some men are born great, some achieve greatness and some have greatness thrust upon them, but greatness, in the sense of fame, is largely a thing of circumstance. There are thousands to-day quietly and conscientiously doing life's great work, without parade or ostentation, and known only to those with whom they come into immediate contact, who are inherently greater than some whose fame fills a continent. Illustrations of the fact that true greatness and fame are not synonymous, abound in the medical profession, and we have one now brought to mind in the case of the late William R. Cruice, of Philadelphia. Dr. Cruice was one of nature's noblemen. Of magnificent physique, well-stored mind, and animated by the spirit of the true physician, he did his work faithfully and well, and was beloved and honored by his clientele and the community in which he moved. Greater praise can scarcely be bestowed on man, and no prouder epitaph can be chiselled on his tombstone.

Dr. Cruice was born in Ireland forty-two years ago, and came to this country at an early age. He was graduated from the University

of Philadelphia and soon succeeded in working into a large practice. The circumstances of his death were peculiarly painful. He had commenced to show signs of Bright's disease, and taking his family with him he repaired to the sea-shore for a brief vacation. On the morning of the 15th inst. he was in unusually good spirits, and determined to go into the surf for a bath. His daughter, a pretty girl of fifteen, stood by watching him. As he got in to the depth of his waist he seemed to be seized with a fit and fell backward. His daughter at once raised the alarm, and as soon as possible the body was recovered, but not until it had passed beyond all possibility of resuscitation.

Notes.

There is some truth intermingled with the following poetry, selected from a communication by DR. GEO. W. DEWEY, of Missouri, to the Medical Record: Our daily papers are filled with cuts and advertisements gynecological. Every reading lady of fifteen is posted on flexures, prolapsions, and "female weakness." A bitter wail comes up from New England that the native population are becoming extinct. Syringes, sponges, and womb-veils will exterminate the descendants of the Mayflower. The quidnuncticus Yankee woman is posted in gynecology. She never breeds. The next decade of aggressive gynecologists will demand a gynecological chair in our female colleges, the business of which will be to teach young ladies how to avoid conception.

The organization of the Association of American Physicians, has aroused the ire of a correspondent of the Journal of the American Medical Association. Hear him: "The day will come when such as seek to destroy the great temple of Medicine (the American Medical Association) in such ways—by caprice and whims and spitefulness—will wofully repent it, will abhor themselves sooner or later, and be ashamed of their associates who, with themselves, lifted a hand or voice to aid in such nefarious work." It is expected that the Association of American Physicians will now incontinently disband. Surely if it is prudent it will do so, for what greater calamity could there be than that in store for its members.

European correspondent N. Y. Medical Journal, referring to next year's meeting of International Medical Congress: "With but few exceptions, I found very little inclination to incur the trouble and expense of a trip across under such discouraging auspices." European correspondent Journal American Medical Association: "I visited PROF. ESMARCH the other day in Kiel. He will come, and from what I can learn the profession of Europe will send a large delegation." The gentle reader will deposit his cash and make his own selection.

MR. SUTTON in his article "Evolution in Pathology," says: "Inflammation, as read zoologically, can be likened to a battle. The leucocytes are the defending army, the roads and lines of communication are the blood-vessels. When there is an invasion of bacilli, bacteria, etc., the leucocytes march to the attack, and when the slaughter is very great 'the tissues become burdened by the dead bodies of the soldiers in the form of pus.' Laudable pus, we presume, represents the dead bodies of officers and others who have distinguished themselves in the conflict.

A Member of Congress, from the West, received the following from one of his constituents: "Dear Sir, my children have been afflicted with scabs all winter, and the medicine given them by the doctor here does not seem to do them any good. I see by the papers that there are some very fine doctors in Washington connected with the Government, and if it does not cost too much I wish you would ask them what is good for the scabs, and write me by return mail."

The Boston Advertiser tells of a physician of large experience who remarked that when he began practice he was worried because people put so little confidence in him, and now he is troubled because they trust his judgment so implicitly. He seems to think that to be thought infallible is far more burdensome than to have one's failings emphasized, as in his younger days.

MR. MIALL, in the British Medical Journal, says that when mammary abscess is on the point of forming, he has frequently seen it disappear under applications of a solution of an ounce of carbonate of ammonia in a pint of hot water. The applications should be made with cloths, and should continue for from half an hour to two hours, the nipples being at the same time protected.

The Weekly Medical Review, of St. Louis, says: "We do not think it right that a Chicago medical college should procure its anatomical material from the St. Louis 'Potter's Field.'" Certainly not. Of course science is cosmopolitan, but the line must be drawn somewhere. One would have thought that the Chicago colleges had more regard for their students, than to ask them to dissect St. Louis cadavers.

Asiatic cholera is still to be found in some parts of Italy, and is extending somewhat, but not with sufficient rapidity to indicate the ex-

istence of any epidemic influence. The summer is now so far advanced that there would seem to be but slight danger of its spread, during the present year, to adjacent countries, or to the British Isles, whence the germ would be most likely to find its way to this country.

N. Y. Medical Journal: "You have large imagination; you ought to write poetry," said a phrenologist to a man whose head he was examining. "I do write poetry," replied the individual, "and the bump of which you are now feeling was caused by a blow from an editor to whom I offered a poem. Please don't bear on so hard."

A man recently presented himself at a Chicago dispensary, and going up to the clerk held out one of the dispensary circulars, with the question: "Say! isn't this the hour for diseases of women?" The clerk replied in the affirmative. "Well," said the unfortunate young man, "I've got a woman's disease, and want to be treated."

The Chicago Medical Society has a standing resolution excluding reporters for the daily papers, out of its meetings. The Medical Journal and Examiner says, however, that, notwithstanding, when anything of note or interest to the public occurs, it invariably finds its way into the public prints. Chicago is very much like Detroit, in this regard.

A prosy, absent-minded young M. D., in his examination of a patient asked many irrelevant questions, some of which he repeated. Among others was the following, which terminated the seance: "You — ah — sometimes have a — ah — tired feeling come over you which——" "Oh, yes," interrupted the patient, "I do. I feel it now. I am very, very tired."

A Dakota correspondent suggests a more pathetic thing than the purchase of a hair-grower from a bald-headed barber, and that is the medical student who spends his vacation in going about selling patent medicines. Varieties of this *lusus naturæ* are said to exist out west.

The succulent watermelon is now recommended as a cheap and efficient substitute for the grape in the treatment of chronic congestion of the liver, chronic intestinal catarrh, and similar affections having their origin, chiefly, in the use of alcoholic beverages and dietetic excesses.

The following are the component parts of a cigar: Acetic, formic, butyric, valeric, prussic, and proprionic acids; also creasote, ammonia, sulphuretted hydrogen, pyridine, picoline, and rubidene, to say nothing of cabbagine and burdockic acid. That's why you can't get a good one for less than five cents.

A lay contemporary calls attention to one of the dangers of kissing, not usually dwelt on in medical dissertations on the subject. "It has long been known," he says, "that kissing causes a species of heart disease, which terminates in matrimonial fever, and the victim dies sooner or later. Generally later."

From the German: "But, honored madam, why have you not let me before be called? Your husband lies, indeed, in highest delirium." Madam: "Yes, see you, so long as my husband by his understanding was, would he nothing to do with a doctor have."

Someone has discovered certain points of similarity between a baby and a widower: He cries a great deal the first three months; after this he becomes quiet, and begins to notice; and it is with considerable difficulty that he is made to survive his second summer.

Book Notices.

Analysis of the Urine, with special reference to Diseases of the Genito-Urinary Organs. By K. B. Hofmann, Professor in the University of Gratz, and R. Uttzmann, Docent in the University of Vienna. Translated by T. Barton Brune. A. M., M. D., late Professor of the Practice of Medicine in the Baltimore Polyclinic and Post-Graduate Medical School, etc., and H. Holbrook Curtis, Ph. B., M. D., Fellow of the New York Academy of Medicine, etc. Second editon, revised and enlarged.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

The physician who practices medicine to-day without taking into account the condition of the urine, as an index of systemic as well as nephritic changes, seriously handicaps his usefulness, to say nothing of the injustice he does his patient, who is entitled, at his hands, to the best treatment which the status of medical knowledge renders possible. The importance of urinary analysis as an aid to diagnosis and treatment has become very thoroughly established, especially within the past two years, and the treatises on the subject have been correspondingly numerous. Some of these have been needlessly minute for the requirements of the practitioner, and others have been too superficial. In the work before us we discover the happy mean and we are not surprised at the popularity which it has achieved, in the profession, both of Germany and Austria and this country. It does not aim to be an elaborate and exhaustive treatise, but merely claims to contain all that is necessary for the student and practicing physician.

The translators have revised the previous edition, and have incorporated in this all knowledge of especial interest to the student

and practitioner, as has been devloped since the appearance of the first edition. The physician who carefully studies this work, and performs all the tests which it describes, will not only become expert at urinary analysis, but will also thereby become better fitted for the discharge of his duties in other directions.

BRIGHT'S DISEASE AND ALLIED AFFECTIONS OF THE KIDNEYS By Charles W. Purdy, M. D., Queen's University, Professor of Genito-Urinary and Renal Diseases in the Chicago Polyclinic, etc. 8vo., 288 pages, with 18 illustrations. Cloth, $2.
Philadelphia: Lea Brothers & Co. 1886.
Detroit: Phillips & Hunt.

The object of this work is "to furnish a systematic, practical and concise description of the pathology and treatment of the chief organic diseases of the kidney, associated with albuminuria, which shall represent the most recent advances in our knowledge on these subjects." DR. PURDY'S writings on the subject covered in his book, in the medical periodicals, have already familiarized his name to the profession, and the appearance of this systematic treatise needs, therefore, little more than to be noticed to ensure for it a sale. The book opens with a consideration of albuminuria, and the chapter does good service in its clear statement of the differences between the true and false variety of the affection which passes under this name. The simple fact of albumin in the urine does not establish the existence of albuminuria proper, or Bright's disease of the kidney, and the author clearly points out the essential differences between the two.

The affections usually discussed in works of this kind receive exhaustive consideration, and the reader becomes impressed with the feeling that the writer writes from a thorough personal acquaintance with his subject, rather than from a knowledge based on the assertions of others. The part of the book which specially attracts attention is, however, that which treats of scarlatinal and puerperal nephritis. In this part the author supplies what, doubtless, the majority of practitioners who carefully consider these affections, have felt to be a want in our literature of the subject. These chapters alone will warrant a purchase of the book.

THE PHYSICIAN'S LEISURE LIBRARY. Published by Geo. S. Davis, Detroit, Michigan.

The first five volumes of this valuable series have reached our table. The whole series is to contain twelve numbers, which will be supplied for $2.50; single copies, 25 cents each. Among the treatises arranged for are the following: "New Medications; A Comprehensive Review of Progress in Therapeutics for the Last Fifty Years," by PROFESSOR DUJARDIN-BEAUMETZ, translated by DR. E. P. HURD; "A Manual of Inhalers, Inhalations, and Inhalants, and Their Use in the Treatment of Catarrhal Diseases of the Respiratory Tract, profusely illustrated, by DR. BEVERLEY ROBINSON, of New York; "The Use of Electricity in the Removal of Superfluous Hair, and in the Treatment of Various Facial Blemishes," by DR. GEO. H. FOX, of New York; "Spinal Irritation (Posterior Spinal Anæmia), by DR. WM. A. HAMMOND, of New York; "Practical Bacteriology," by DR. THOMAS E. SATTERTHWAITE, of New York; and "Antiseptic Midwifery," by DR. H. J. GARRIGUES, of New York.

The names of these authors and the titles of their essays are of themselves ample guarantees of this Leisure Library, and an examination of the numbers before us is sufficient to convince the active practitioner of their adaptability to his requirements. The books are paper-bound, and can be conveniently carried in the pocket for perusal during leisure hours. The publisher has struck a good idea, and has shown good judgment in his selection of works and authors. His venture cannot fail to meet with substantial endorsement.

Therapeutic Brevities.

NEUROTIC TREATMENT OF CATARRH.—In an article in the Lancet on the Neurotic Treatment of Catarrh, DR. DAVID B. LEES gives the case of a very rickety girl of four years, with highly-deformed chest. A stream of catarrhal secretion was flowing from both nostrils, marked dyspnœa, temperature 101°. The chest showed good resonance everywhere, but an abundance of catarrhal râles. Turpentine liniment was rubbed on the chest, and eight grains of bromide potassium and four minims tincture belladonna were given every four hours. In 46 hours the patient was quite well. The writer says he has never failed to rapidly arrest his own catarrhs(with bromide,40-60 grains,tincture belladonna six minims every six hours), nor has he failed in a single instance in which he himself has administered the remedies. DR. G. ABBOTT, mentioning the above paper, says that, where a catarrh is the result of exposure to a cold or east wind, it can always be limited to the nostrils and cured in a few hours, by the occasional inhalation of a strong solution of ammonia. This can be carried in the pocket and used whenever a watery flux comes on.

HYPODERMIC INJECTION OF CARBOLIC ACID IN ERYSIPELAS.—In the venereal wards, under the care of DR. MONTES DE OCA, in Buenos Ayres, considerable success has been obtained in cases of erysipelas by the injection of a two-per-cent. solution of carbolic acid, as recommended by HUETER, BOECKEL, and SUKOWENKOFF. Care was taken to introduce the

carbolic acid as near as possible to the part attacked. In one case where a patient with syphilitic cachexia had been attacked for the second time, six injections, two being given daily, served to limit the affection to the right ear, which was the part affected, and to entirely prevent its spreading further.—*Lancet*, July 24, 1886.

Applications of Glycerin in the Treatment of Simple Ulcer. — Demarquay speaks highly of the following mixture as applied to simple indolent ulcer:

Glycerole of starch, 5 parts.
Sulphate of alumina and zinc, 1 part.

Where the ulcer is painful he uses a dressing thus composed:

Sydenham's laudanum, 4 to 5 parts.
Glycerin, 100, parts.

Such dressings are found to be of advantage whether the ulcer be scorbutic, scrofulous, or syphilitic. — *L' Union Médicale*, No. 55, 1886; *Medical News*.

Pain-Killer.—The following mixture compounded by M. Poulet is highly recommended by him as a pain-killer:

℞ Tr. capsici, 200.0;
Liq. ammon., 100.5;
Essentiæ thymi,
Chloral. hydratis, ää 10.6;
Alcohol, 60 per cent., 1000.0.
M.

The pepper, ammonia and alcohol are digested together for a month, then the chloral and thymol are added. It is used externally as a liniment, either pure or diluted with oil. It is given internally in ten- or twenty-drop doses and is recommended for dysentery, enteritis, and rheumatism.

Treatment of Acute Tonsilitis.— Dr. John Brown states, in the British Medical Journal, that it is a rare event for suppuration to occur in acute tonsilitis, if treated early with the following mixture:

℞ Sodii salicylat., ʒ iss.
Pot. bicarb., ʒ iss.
Tinct. aconit., ♏ 40.
Liq. opii. sed., ♏ 30.
Sp. chloroform, ʒ ii.
Aq. ad., ʒ viii.
M.

One ounce to be taken every two or three hours for the first thirty-six hours. The same mixture is his sheet anchor for rheumatic fever.

Cocaine Spray in Epistaxis.—I. A., aged 20, suffering from a severe attack of typhoid, was troubled by frequent epistaxis, and Dr. Francis L. Haynes tells us in the Therapeutic Gazette (July 15) that the attacks were invariably relieved by throwing into the nostrils, for a few moments, spray from a two-per-cent. solution of cocaine. On one occasion, copious bleeding was allowed to persist for three hours, when the spray checked it immediately. Until the patient convalesced, the spray was needed almost daily, and frequently several times a day, but the nurse never allowed more than a few drops of blood to be lost.—*Medical and Surgical Reporter*, July 31, 1886.

A Palliative for Uterine Cancer.— Prof. Sireday (Medical Press, London, May 26) uses a very simple, and, in many cases, very successful palliative treatment in cancer of the womb. First he washes out the vagina with corrosive sublimate (1-3000) and then applies small plugs of cotton dipped in a four-per-cent. solution of chloral and dusted with iodoform to the wound. The first plug should exactly cover the wound and be left *in situ* for two days. After a few days of this treatment the ulcer becomes clean, and resembles an ordinary wound, and pain is greatly lessened; hæmorrhage is also arrested.

A Remedy for the Pigmentation of Pregnant Women.—Monin recommends the use, night and morning, of an ointment having the following composition:

Cocoa-butter, } each, 2½ drachms;
Castor-oil, }
Oxide of zinc, 3⅓ grains;
White precipitate, 1⅔ grain;
Essence of rose, 10 minims.
—*Gaz. de Gynecol.; N. Y. Med. Journal.*

Calomel as a Diuretic. —Prof. Braun, Vienna Clinic, says: The use of calomel as a diuretic, which has been tried in other clinics, has given good results in Vienna. It is efficacious only when the kidneys are healthy. In some cases of heart disease, in which as yet no interstitial changes had occurred, calomel produced free diuresis where other means had failed. It was given in rather large doses, and salivation rarely followed. No explanation is given of its mode of action.—*Medical News*.

Postural Treatmemt of Tenesmus.—The tenesmus of dysentery or diarrhœa or the vesical tenesmus of cystitis may be very much relieved by placing a pillow under the buttocks and making the patient lie upon his back in such a manner that the parts are thus raised

somewhat higher than the other portions of the body.—*St. Louis Medical and Surgical Journal.*

Chrysophanic Acid, a Cure for Ringworm.—Seven grains of chrysophanic acid in an ounce of chloroform provides a very successful application for the treatment of ringworm. It should be very cautiously applied to the part affected two or three times daily with a camel's-hair brush, care being taken not to inhale the vapor.

Catarrhal Headache.—Iodide of potassium is said to quickly relieve the dull headache so often accompanying an ordinary cold in the head. Two grains may be dissolved in a glass full of water, which is to be taken in little sips during half an hour. Dr. Davis recommends this simple remedy, and says he has hardly ever known it to fail.

A Cure for Toothache from Dental Caries.—Dr. V. Gsell-Feltz, of St. Gallen, warmly recommends, in toothache from dental caries, the application of cotton-wool soaked in an oily fluid obtained by melting together five grammes of camphor, five grammes of chloral and one gramme of cocaine. Relief is complete and lasting.—*Medical Record.*

Hydrochlorate of Caffeine as a Local Anæsthetic.—M. Terrien (Jour. de méd. de Paris) finds that, in ophthalmic surgery at least, the anæsthetic action of caffeine is almost identical with that of cocaine.

Medical Progress.

On the Management of Incomplete Abortion.—Arthur W. Edis, M. D., F. R. C. P., publishes in the British Medical Journal, July 24, 1886, some valuable hints on this important subject. Though not very novel, they cannot be too carefully observed by the obstetrician.

The subject of incomplete abortion, or imperfect expulsion of the whole of the ovum, cannot fail to prove of interest to all who have to deal with the emergencies of general practice. The risk to the patient, whether from primary hæmorrhage or from septicæmia, is often very great; a fatal issue is by no means unfrequent, and even where this does not result, the general health may become seriously affected from the prolonged hæmorrhage, septic absorption, or uterine disorder ensuing in consequence. Apart from this, the anxiety experienced by the practitioner—the risk of his reputation suffering, even should he escape prosecution for malpractice—renders the subject one of unusual importance, and, therefore, well worthy of consideration.

The consequences of incomplete abortion are far more serious than at first might be imagined. Many a young life has been prematurely cut short, the hopes of maternity blighted, or prolonged uterine trouble induced, in consequence of an early miscarriage, within a few months of married life, not having been properly managed.

It will be beyond the scope of the present communication to allude even to the causation, symptoms, diagnosis, prophylaxis, or treatment of abortion generally. My remarks will be confined solely to the management of incomplete abortion, where the ovisac has ruptured, the embryo been expelled only in part—the placenta, either entire or in fragments, being retained in utero, and giving rise to hæmorrhage or septicæmia, in consequence.

The principle of early and complete evacuation of the contents of the uterus, where the vitality of the ovum has been destroyed, and abortion is inevitable, although generally accepted by everyone competent to give an opinion, is yet too often neglected in general practice, and leads to the most calamitous results. The following cases will illustrate this.

M. T., aged 27, single. When first seen in consultation with her medical man, who had only been called in a few days previously, I found her lying in bed, on her back, with the knees drawn up, the abdomen tympanitic, very tender on the least pressure. The pulse was 144, very feeble; temperature 103.2° Fahr. The tongue was thickly coated, red at the edges, and inclined to be dry. She was delirious at times, but could be roused to answer questions. There was persistent fœtid diarrhœa, constant sickness, and much pain complained of all over the abdomen. On vaginal examination, a sanious sanguineous discharge was found exuding from the os uteri, which was somewhat patulous. The uterus was enlarged, fairly mobile, retroverted. Thus far, no history had been obtained explaining her symptoms. Seeing that the patient was in a most critical condition, evidently suffering from septic peritonitis, I elicited from her paramour that she had had a miscarriage, procured some ten days previously by a midwife. She had missed two periods, and came up to town for the purpose of being set right. Two days afterwards she had severe pain and profuse hæmorrhage, but I could get no well-marked history of any substance having passed. She became very feverish, and was compelled to keep in bed. It was not until nearly a week after this that a medical man was called in, and then he was told nothing beyond that she was losing blood.

The patient was too ill to bear much interference. The uterine cavity was thoroughly irrigated with iodized water, quinine and opium administered, and every effort made to rally the patient; but she sank and died within twelve hours of my seeing her.

There can be no question that retained products of conception, decomposing within the uterus, had given rise to septic peritonitis. Had these been removed and the case properly treated from the outset, the issue would, in all probability, have been different. One can but regret that skilled assistance had not been rendered until the patient's condition precluded any active treatment from being adopted.

In nulliparæ, where, after cessation of the catamenia for one or more periods, and the ordinary signs and symptoms of pregnancy exist, pain and hæmorrhage occur, showing

abortion to be inevitable, our object should be to favor the expulsion of the ovum with as little delay as possible. The insertion of a carbolised sponge-tent into the cervix uteri, for a few hours, will not only serve to check the hæmorrhage, if this be at all profuse, but also to dilate the cervix, and so facilitate the expulsion of the ovum entire. It is in these cases, owing to the undeveloped or undilatable condition of the cervix, more especially where ergot has been too freely administered, that the ovisac becomes ruptured, the embryo expelled, and the chorionic villi or placenta retained.

Mere plugging the vagina with the intention of arresting hæmorrhage from the uterus is both unscientific as well as unsatisfactory, and should never be resorted to unless in severe emergencies, where either the practitioner has not the instruments at hand, or does not possess the requisite manipulative skill for passing a sponge-tent into the cervix uteri.

In such cases, small pieces of sponge wrung out of iodized or carbolized water, or other antiseptic solution, are preferable to the ordinary cotton-wool or strips of linen usually employed, in that the former tend to expand, and so fill up the vagina when moistened, whereas the latter shrink, and allow the hæmorrhage to continue. A vaginal tampon, in any case, should never be left in for more than a few hours without being removed.

In the event of a sponge-tent having been inserted into the cervix uteri, and the hæmorrhage arrested for the time being, the question will arise: How long shall this be left in before making efforts to empty the uterus? This will depend somewhat upon the time of the day or night when the practitioner has passed the tent, the amount of hæmorrhage which has already occurred, and other considerations. Owing to the extreme nervousness of the patient, her intolerance of any digital interference, the limited capacity of the vagina, or inability to depress the uterus by conjoined manipulation, owing to the patient holding herself so rigidly, the administration of an anæsthetic will generally be found requisite. This should invariably be entrusted to some competent assistant, and not left to the discretion of some unqualified friend or nurse. The operator is thus free to direct his attention solely to the evacuation of the uterus, which must be done systematically and thoroughly, not partially and imperfectly, as this increases the risk of hæmorrhage and septicæmia. The time selected, therefore, may be regulated somewhat by the practitioner's convenience; if the tent be inserted late at night, opium may be given to allay pain and secure rest, and the operation fixed for the following morning.

A sponge-tent should never be left in above twelve hours, and when removed, iodized or carbolized water should be freely injected into the vagina before attempting any further manipulation. If the cervix be already sufficiently patulous to admit the finger, or hæmorrhage is not an urgent symptom, the insertion into the cervix uteri of a sponge-tent is uncalled for.

Having first seen that the bladder is empty, the patient should be placed close to the edge of the bed, in the dorsal or left lateral decubitus, as may seem most convenient to the individual practitioner. With one hand pressed over the lower abdomen, the fundus uteri is then depressed, so as to enable the forefinger of the other hand to pass entirely into the uterus, when, if possible, the whole of the remaining ovum is swept out of the uterus. If this cannot be accomplished, the portion of placenta within reach must first be detached and removed; the uterus then generally contracts sufficiently to bring the remainder of the placenta within reach, when the finger is again employed to sweep it out, or scrape it off from the uterine wall.

Firm pressure should be employed from above, and the finger should not be withdrawn until the uterus is felt to contract, so as to avoid the formation of clots in the interior.

It is well to inject hot iodized water at 110° or 120° Fahr. through a metal tube or elastic catheter into the uterine cavity, to wash out any placental *débris*, and also to check further hæmorrhage, should this be troublesome. A binder should then be applied to the abdomen, as after ordinary labor, ergot administered, and the usual precautions taken to prompt convalescence.

In practice it will, however, often be found difficult, if not impossible, to determine whether the whole of the placenta has been expelled, and it is in these cases that danger arises, whether from recurrence of hæmorrhage, or from symptoms of septic absorption. If any doubt exist, it is better to explore carefully the cavity of the uterus. DENMAN long ago pointed out the fact that, where any portion of the placenta remains *in utero*, the cervix does not contract thoroughly, but remains more or less patulous. If symptoms of septicæmia have already declared themselves, it may be unwise to insert a sponge-tent. If any difficulty be experienced in passing the finger sufficiently far up into the uterus to allow of placental *débris* being removed, the ovum forceps will here prove of much service. Having inserted them well into the uterus, the handles are separated gently, and any projecting portion of placenta seized and removed, the operation being repeated in a different directions until the whole of the contents have been secured. Where the uterus remains usually bulky, hæmorrhage recurs on the patient rising, or persists unduly long after the supposed miscarriage, or where the lochia are distinctly offensive in character, we may be pretty certain that the uterus is not yet empty. In place of contenting ourselves with the administration of ergot, our plain duty is to explore the cavity of the uterus. Instances have been recorded where portions of placenta have been extracted many months, and even years, after the miscarriage had happened, no efforts having been made to remove the cause, the symptoms alone being treated.

The narration of a case of this nature may prove of interest as exemplifying practically the treatment indicated.

M. C., aged 40, had been married three years, up to which time she enjoyed most excellent health. She had a miscarriage six months after marriage, at the end of the second month from which she recovered perfectly. Six months later a second miscarriage took place, and since then she had never been thoroughly well. The periods, at first, were rather prolonged, but not irregular. About Christmas, 1884, serious hæmorrhage took place, and since that date hæmorrhage had been more or less

constant, absent for a week or two, then suddenly beginning again. In November, 1885, she stated that she was subject to bursts of hæmorrhage every two or three days, with watery discharge in the intervals. There was no pain at any time of any moment.

On examination, the uterus was found to be bulky, fairly normal in position, mobile, the uterine sound passing upwards and forwards three inches. The cervical canal was somewhat granular, and there was much glairy mucous discharge, but not offensive. The cervix uteri was dilated by means of laminaria tents. Ether was administered, and the interior of the uterus explored. Several portions of hypertrophied mucous membrane were scraped off with the curette, together with some small nodular masses. Linimentum iodi was freely applied to the uterine cavity, which was then syringed out, and ergot administered every four hours. There was no return of hæmorrhage after this until about a fortnight subsequently, when the regular catamenial period came on, and lasted six days. The patient left for the country a month after her admission. Two months later the husband wrote to me, saying, "There has not been the slightest hæmorrhage of any kind so far, nor has there been any return of the period." There can be little doubt, I think, that the removal of some placental *débris*, together with some hypertrophied mucous membrane, constituting the so-called fungous endometritis, served effectually to arrest hæmorrhage, and thus cure the patient.

In some cases, where the placenta is very adherent, and cannot readily be removed by the fingers or forceps, the blunt curette may be employed to scrape the surface, so as to remove all *débris*. This method is more often indicated in those cases where a portion of the placenta has been retained for many weeks or months after the incomplete miscarriage has taken place, and where a species of fungous or villous endometritis has been set up.

Syringing out the cavity of the uterus with hot iodized or carbolized water, at 110° to 120° Fahr., so as to remove all *débris*, where removal has been difficult, or where hæmorrhage is free, often proves of much service in lessening the risk of septicæmia. This may be repeated morning and evening for some few days, if deemed requisite. Swabbing out the cavity of the uterus with liq. ferri perchlor. or linimentum iodi, where the discharge has been very offensive, or the placenta very decomposed, is indicated in some cases, but should not be resorted to as a routine-practice.

It is of great importance to keep the patient quiet in bed for at least a week or ten days, apply a binder firmly to the abdomen, as after ordinary labor, and resort to vaginal injections. If the lochia become in the least unpleasant or offensive, intra-uterine injections should be employed. Ergot and cinchona may be administered, with advantage, in most cases.

The administration of ergot is not an unmixed blessing. Where uterine action has already set in, ergot intensifies this action unquestionably; but if only a portion of the ovum be expelled, ergot tends to produce such an amount of contraction of the cervix uteri as to preclude further attempts at removal of the remainder. We may have to wait several hours until the influence of the ergot has passed off, before being able to insert the fingers or forceps to complete the delivery of the placenta. If hæmorrhage be severe, ergot is, of course, indicated, and must be given; but, when the hæmorrhage has ceased, it may be well to refrain from further administration of the drug until complete removal of the placenta has been effected, when its employment may again be persisted in. Where we have reason to believe that the whole of the placenta has not been expelled, and the hæmorrhage continues, or recurs on the least exertion, and ergot fails in enabling the uterus to throw off the retained portion, its employment should be discontinued, and proper means adopted to extract the remainder of the placenta.

I have seen instances where ergot had been administered freely and continuously for several successive weeks or months, without the desired effect being produced. The illustrates the abuse, not the rational use, of the drug, and cannot be too strongly condemned.

It is with the hope of directing special attention to the absolute necessity of removing all placental *débris*, in these cases of incomplete abortion, that I have thought it worth while to occupy your time and attention on this occasion, and if I have succeeded in this, my object will have been fulfilled.

THE USE AND ABUSE OF TEA.—A French observer has recently tabulated the evil results which, in many cases, follow the excessive use of what is now the favorite beverage of Teutonic and Sclavonic nations. The list is a formidable enumeration of neurotic and dyspeptic affections, which are not the less worthy of attention because they are mainly functional disorders, tending to the embittering of existence rather than the shortening of life. English clinical teachers are somewhat divided on this question. Some make light of the alleged evils of tea-drinking, and regard the prohibition of tea as, in many cases, merely a professional fad. Others teach that the mischief, of which they admit the existence, is due less to excessive use of tea than to the omission from the regular dietary of the really nutritive and sustaining elements. A third class regard tea-drinking as an evil almost comparable to alcoholism.

Tea has won its way to favor among civilized nations mainly, it would seem, as an agreeable nervine stimulant. As SIR WILLIAM ROBERTS points out, in his interesting lectures upon dietetics, a craving for nerve-stimulation is one of the most marked characteristics of advanced civilization, although savage man is by no means devoid of this universal human instinct. The stimulants in common use are tea, coffee, tobacco, and alcohol—not to mention such agents as opium, or *haschish*, which are, perhaps, less stimulant than narcotic. Of this group, tea and coffee are the favorites, as they suit the taste of both sexes; and their beneficial effects undoubtedly far outweigh the evils which occasionally spring from their abuse.

Tea is an agreeable cerebral stimulant, quickening intellectual operations, removing headache and fatigue, and promoting cheerfulness and a sense of well-being. It is known to all English-speaking people as the "cup that cheers but not inebriates:" and it has long been a favorite with students, literary men, and

others engaged chiefly in brain-work. Tea is also a mild sudorific, and it is found to exercise a cooling influence, after the preliminary effect due to the imbibition of a hot fluid has passed off. The influence of tea upon the digestive organs has not been so definitely made out; but the most recent observations seem to show that, while it somewhat retards primary digestion, it aids the absorption and metabolism of food-elements. From such physiological facts, it is clear that tea is chiefly of service during or after physiological or intellectual effort, and at the time when absorption of the products of primary digestion is in process. It cannot too strongly be asserted that tea is not in any exact sense a true food, and that its nutritive value in itself, is practically naught.

As might be conjectured from the nature of the physiological action of tea, the effects of its abuse fall chiefly on the nervous and digestive systems. Nervous irritability, palpitation, insomnia, and sense of brain-fatigue are among the most prominent of the neurotic symptoms; and, although it is unquestionable that these symptoms are often etiologically connected with other sources of nervous disturbance as well as tea-drinking, it is not less clear that they are greatly aggravated by the excessive use of tea. The digestive symptoms are impairment of the appetite, pain and flatulence during the process of digestion, and defective intestinal action—the symptoms, in fact, of one of the varieties of atonic dyspepsia. How far these symptoms are due to the thein contained in tea, and how far to its tannin, is a question. Sir Wm. Roberts has shown that the most rapid infusion does not prevent the dissolving out of a large proportion of the tannin, and we are disposed to conjecture that the digestive symptoms may to a large degree be safely attributed, not to any chemical action, but to the same cause which produces the neurotic disturbance, namely, the thein.

The sufferers from excessive tea-drinking may be grouped into three classes.

First, there is the large class of pure brain-workers, who speedily discover that, while alcohol is pernicious to them, tea affords the stimulus which they desire. They indulge in it without fear of mischief, and often to an unlimited extent. Dr. Johnson's tea-drinking was proverbial, and many distinguished writers could tell a similar tale. After a time, the neurotic symptoms enumerated above begin to make their appearance, and, in many cases, do much to impair temper, and to limit the capacity for sustained intellectual effort.

Secondly, there is the large class of women of the better classes who, beginning with afternoon tea, often end by using their favorite stimulant in the intervals between all the meals of the day, and as often as the humor takes them. The result is that appetite becomes impaired, and the prostration due to insufficient nourishment is combated with more potations of the ever-welcome stimulant, until the vicious circle is well established.

Thirdly, in all our large manufacturing towns there are numbers of factory-operatives, especially women, who, finding it difficult to provide a cheap and appetising mid-day meal, fly to the tea-pot, and do a large amount of severe physical labor on this miserable dietary. It is most important to impress upon this class, who are usually profoundly ignorant of everything concerning health and diet, that tea is not a food, and that the delusive sense of satisfaction which it bestows is a dangerous snare.

In addition to the above classes, there is a small group of persons to whom tea seems a positive poison. We know that idiosyncrasy accounts for the most extraordinary departures from the normal rule in matters of diet or the action of medicine; and the number of persons whose idiosyncrasy includes an intolerance of tea is considerable enough to make the subject worthy of professional attention.

Sufferers from the abuse of tea should abstain from its use, and substitute either coffee or cocoa. It will be found that many of those who are unfavorably affected by tea are equally susceptible to the action of coffee, but this is by no means universally true, and the substitution can often be made with decided advantage Cocoa suits almost all cases, and, whatever may be its deficiencies on the score of palatability, it is a genuine food, and its modern preparations are becoming more and more elegant and pleasing to the taste.—*British Medical Journal.*

Boric Acid Powder in the Treatment of Granular Lids.—Dr. James L. Minor, in a recent number of the New York Medical Journal, reports an interesting series of cases illustrating the use of boric acid in treating granular lids. We quote the paper entire with the exception of the cases:

"I was first led to the use of boric-acid powder in the treatment of granular lids, by the beneficial effect produced by this agent upon tissues somewhat resembling the conjunctiva in this disease. I had seen granulation-tissue in the ear, and on ulcers on other parts of the body, shrink and disappear under the use of this agent, and in the nasal cavities the thickened and swollen mucous membrane, almost blocking these passages, was often thinned down under the continued use of boric acid. My first publication upon the subject appeared in the Virginia Medical Monthly, of February, 1882, and since that time the method of treatment there described has been carried out by self and others with such success as is shown below. A few points as to the details of its use may not be inappropriate:

1. *Method of Applying the Powder.*—The lids being thoroughly everted, the pulverized acid is freely dusted over the exposed conjunctiva with a camel's-hair brush. The amount will, of course, vary, but in most cases of granular lids a quantity should be introduced sufficient to cover completely the parts to which it is applied. The frequency of application will vary from three times a day to three times a week—this difference depending upon both the individual and the disease. It will be safe to repeat the application as soon as the disagreeable symptoms which have been relieved by the remedy begin to appear again.

2. *Effects Produced by the Powder.*—Its immediate effect is to produce a burning, gritty sensation, with some pain, lasting for five or thirty minutes, and a free serous discharge, after which relief is experienced, and the lids feel freer, lighter, and smoother than before its use. This beneficial effect lasts for a period varying from a few hours to several days. The conjunctiva at times shows reduction in swelling and thickening as soon as the irritation

following its use has passed off. This is, however, more noticeable after the remedy has been used for a week or more, when perceptible thinning of the conjunctiva is observed, and clearing up of the cornea if pannus be present. When boric-acid powder is applied to succulent tissue or a swollen mucous membrane, a free serous discharge quickly appears, which lasts for ten or twenty minutes. This discharge occurs largely at the expense of the volume of the tissue to which it is applied, and is followed by a shrinkage of the same. This is best illustrated in the nasal cavities, when they are closed or nearly so from swelling of the mucous membrane. A short time after the use of the acid the passages became clearer and freer, and this is noticeable to the examiner as well as to the patient. This serous flux is probably of an osmotic character. Its escape relieves succulent tissue of its superabundance of serum, thereby causing contraction, which facilitates a healthier circulation and better nutrition. Its action is as an irritant in the same direction, and is especially instrumental in the cure of corneal affections. The power possessed by boric acid of restraining micrococcal development, by diminishing diapedesis, of lessening the amœboid movement of leucocytes, and other tissues and chemical changes which it produces, are factors which enter into the theory of its action. When the powder is applied to a granular conjunctiva, it not only covers the entire membrane, but enters the cracks and crevices between the granulations, and brings about the changes indicated upon the conjunctiva as a whole and upon the granulations individually.

3. *Cases Suitable for and Facts Governing its Use.*—I have used boric-acid powder in all forms of granular lids, and in most varieties of conjunctivitis, with benefit. I think, however, that the papillary form of granular lids is most amenable to its influence. Pannus in every instance has been remarkably improved, and in many cases cures have been effected. In ophthalmia neonatorum some cases have received benefit, but I rely but little upon the powder in purulent cases. On the contrary, it acts best when the secretion is scanty and serous. I have often noticed that the conjunctiva became less tolerant of its action after the powder had been used for three or four weeks, and in such cases the treatment has been changed with success. Boric acid in this particular is similar to other agents in general use for the treatment of granular lids, for it is often noticed that a remedy will wear itself out, as it were, and it becomes necessary to substitute another agent for the one which has been used. Boric acid is only one of these remedies, and is no more of a specific than others, yet it is an important addition to our list of efficient remedies for a disease which is often rebellious and always obstinate and protracted. It is less painful than other remedies, its effects in this particular being often recognized by the patient, who will ask to have the powder repeated, because it is less painful and more efficient in affording relief than other agents which have been employed. Jequirity has done much towards simplifying and hastening the treatment of granular lids, but there will always remain a large contingent in which the special condition or the general surroundings of the patient will debar its use, and in such cases as these we must resort to those remedies that are known to be of value—possibly less brilliant, but entirely free from danger.

THE INSUFFLATION OF IODOFORM INTO THE TRACHEA AFTER TRACHEOTOMY FOR DIPHTHERIA.—Were it not for the fact that after tracheotomy for diphtheria in children, death is extremely common from the spread of the membrane down the trachea, the operation would be much more popular than it is at present. It is usually simple and successful enough as an operation, but the continuation of the disease in the trachea renders the final results far from satisfactory. After losing several cases from the above cause, it occurred to me that the insufflation of iodoform into the trachea after the opening of the wind-pipe, might do something towards preventing the appearance of membrane there, and might thereby lessen the probability of death. The experiment proved eminently successful in the following two cases:

Case 1.—I was called to see a boy, aged four years and a half, on the night of Nov. 2d, 1885. I found the case to be typical of the so-called diphtheritic croup. The face was flushed, the glands beneath the angle of the jaw were enlarged, and his breathing was stridulous and performed with great effort. I advised instant tracheotomy, which the parents refused. I prescribed aconite, the use of the steam kettle, etc., and left him for the night, very doubtful of his chance of life. When I saw him next morning the symptoms were intensified. The face was livid, the eyes staring, and the expression one of extreme anxiety. The sternum and anterior parts of the chest wall were retracted during inspiration. I insisted upon tracheotomy being performed, to which the parents consented, but with reluctance. I left for instruments and assistance, and on my return found the child in the same condition. I placed the patient under chloroform, and opened the trachea. A large quantity of blood and membrane were at once expectorated through the wound, and the tube was without much trouble placed into the trachea. After this artificial respiration had to be resorted to, and was continued by my colleague, DR. BRIDGER, for fully twenty minutes before respiration was properly established. Two hours after the operation I removed the inner tube, passed a thin insufflator down the outer one, and blew about ten grains of iodoform down the trachea. The child had a slight paroxysm of coughing, and, to judge from the expression of his face, seemed to experience a rather unpleasant sensation, but there was no worse result. The insufflation was repeated every four hours. Next morning I found the tube comparatively clear, but the temperature was 102.5°. Being rather afraid of iodoform poisoning, I stopped the insufflation. During the day the tube got frequently clogged with membrane, and had to be removed every two or three hours. At night I resumed the insufflation and repeated it every three hours, with excellent effect. At 3 o'clock next morning I was called by the patient's father, who, in attempting to remove the inner tube, had pulled the outer one with it. I found the patient in great distress, breathing through the wound with considerable effort. After some difficulty

I reinserted the tube. From that time the patient rapidly recovered, and on the fifth day I removed the tube. The patient is now alive and quite well, with a slight cicatrix over the site of the wound.

Case 2.—This was a somewhat similar case to the foregoing, although the symptoms were not so well marked. The patient was a little girl three years of age, whom I was called to see on the night of Dec. 10th, 1885. I found the patient suffering from symptoms of suffocation. The breathing was stridulous, the voice scarcely audible, the glands beneath the angle of the jaw enlarged, and the face much flushed. I recommended tracheotomy, and performed the operation that night. After the tube was inserted, I insufflated about fifteen grains of iodoform into the trachea, and repeated this procedure every four hours. The child made an uninterrupted recovery. On the third day I stopped the iodoform, and on the fourth removed the tube. There was no trouble with the wound, and recovery was perfect.

When iodoform is insufflated into the trachea, the cilia of the epithelium on the mucous membrane carry the particles of iodoform upwards as far as the larynx, when they are expectorated with the mucus through the tracheotomy tube. I found that the best time to insufflate was just after the act of expiration.—GEORGE SHIRRES, M. B., C. M., in *Lancet*, July 24, 1886.

URETHAN AS A PHYSIOLOGICAL ANTIDOTE TO STRYCHNINE.—Some very interesting observations have quite recently been made by PROFESSOR COZE on the subject of the physiological effects of urethan, and more particularly on its antagonism to those of strychnine. The first point is its extreme tolerance when injected subcutaneously, or into the peritoneal cavity. Eight or ten grains so injected did not set up any local irritation in the frog, nor did thirty grains in the Guinea-pig. No symptoms of gastric irritation were produced by from eighty to one hundred grains given by the mouth, in rabbits. The effect of the drug on the blood appears to consist in an increase of the amount of oxygen (four per cent.); and the nervous exhaustion which follows its use may, perhaps, be attributable to the greater difficulty with which the blood parts with its oxygen in favor of the nervous system. Its influence on the tetanus of strychnine-poisoning was shown in the following manner: A frog weighing just under an ounce, was injected with $\frac{1}{100}$ of a grain of sulphate of strychnine (the minimum fatal dose being $\frac{1}{1500}$ of a grain, according to FALCK); and as soon as tetanus declared itself, five grains of urethan were injected. Four minutes later, the tetanus ceased, and the muscles became completely relaxed. The next day, to the professor's astonishment, the animal was all right again. This experiment was repeated many times, with larger and smaller doses of urethan; the effects were not so lasting with doses of less than five grains, but, if the tetanus returned, it could be almost instantly arrested by a further injection. A mixture of strychnine and urethan injected together gave rise to no tetanic symptoms, but rather to muscular relaxation. On the Guinea-pig, the effects obtained were the same; this animal being somewhat less amenable to the action of strychnine, one-eighteenth of a grain of the drug was injected simultaneously into two Guinea-pigs. A quarter of an hour later, both the animals being tetanised, one of them was injected (into the peritoneal cavity) with fifteen grains of urethan; the convulsions ceased; the respiration coming down first to 72 and then 40 per minute. The other animal, the check experiment, succumbed to twenty minutes to the effects of the strychnine. For a rabbit weighing two and a half pounds, the minimum fatal dase of strychnine is $\frac{1}{120}$ of a grain. Accordingly, to one weighing three pounds, successive injections were administered, amounting to one-fortieth of a grain of the sulphate of strychnine, rapidly followed by a violent attack of spasm; the animal leaped and fell down breathless, and in a state bordering on asphyxia. Fifty drops of urethan were then promptly introduced into the stomach, after a few artificial respirations. In the course of a few minutes, the tetanic rigidity began to lessen, first in the hinder part of the body, respiration became deeper, and the animal fell into a quiet sleep. Two hours later, the rabbit raised its head without any convulsion, and gradually recovered. The next day, the only symptom was a little weakness in the hinder legs; and, on the next day but one, the animal had to all appearances completely recovered. The contrary experiment was also made, the urethanised animal being injected with one-fiftieth of a grain of sulphate of strychnine, without the production of tetanus. All the experiments were repeated a certain number of times, but always with the same result. In other experiments, he administered a mixture of fifty grains of urethan with one-fiftieth of a grain of strychnine, and no spasm or rigidity followed. He pushed the strychnine to one-fifth of a grain without any apparent effect; and even with a quarter of a grain, although a few spasms manifested themselves, the animal did not die. On a dog weighing 25 pounds, one-fifth of a grain of strychnine was counteracted with 75 grains of urethan, and in twenty minutes the animal got up, and walked away with some difficulty. The next day he was all right again. DR COZE suggests that clinical use should be made of the drug in conditions attended with convulsions, and more especially in cases of tetanus.—*British Medical Journal*, July 24, 1886.

NITRATE OF SILVER IN THE TREATMENT OF ORCHITIS AND EPIDIDYMITIS.—There is a sufficient diversity of opinion as to the best treatment of orchitis and epididymitis, the result of acute gonorrhœa, to induce me to give our experiences at the Liverpool Lock Hospital. When I first became surgeon, eleven years ago, I found that the practice adopted in all these cases was that which had been suggested by MR. FURNEAUX JORDAN in 1869—viz., by painting the affected testicle with a strong solution of nitrate of silver (two drachms to one ounce), at the same time enforcing strict rest in bed and supporting the inflamed organ upon a small pillow, so as to prevent it from hanging down, It had been adopted for some years previously by MESSRS. WORTHINGTON and MCCHEANE, who were the surgeons to the hospital at the time when MR. JORDAN suggested this mode of treatment; and also by MR. CHAUNCY PUZEY, who succeeded MR. WORTHINGTON, during the two years of his surgeoncy.

I have invariably pursued the same treatment now for eleven years, and so has my colleague, Dr. Armand Bernard, who succeeded Mr. McCheane in 1882, and has thus had four years' experience of the treatment.

At my request the resident superintendent of the hospital, Mr. Serjeant, has given me the following statistics of all the cases of orchitis and epididymitis combined from June 1st, 1875, to June 1st, 1886, an interval of eleven years. The numbers are as follows:

Years.....	Number.
1875 to 1876.....	32
1876 to 1877.....	15
1877 to 1878.....	22
1878 to 1879.....	28
1879 to 1880.....	30
1880 to 1881.....	16
1881 to 1882.....	31
1882 to 1883.....	28
1883 to 1884.....	24
1884 to 1885.....	18
1885 to 1886.....	25
Total.....	269

All these were patients admitted into the hospital; we have no out-patients.

I have always found the treatment I have mentioned most successful. The acute pain, often amounting to agony, is soon subdued, and in the majority of cases the testicle returns to its normal size in the course of a few days. Sometimes a second painting is necessary, but this suffices. In private practice I have always used the same application. When patients can be induced to take absolute rest in bed, the result is equally successful as in the hospital. When, however, patients are compelled to follow their usual occupations, the recovery must obviously be slower, as it is impossible by any suspensory bandages or by handkerchiefs, however skillfully applied, to ensure such perfect rest for the testicle as when the patient is lying in bed. I have heard it argued that rest in bed is efficient in itself to effect a cure, but a very few cases so treated with spirit lotion as an application, has convinced me that it is not so. The immediate effects of the nitrate in allaying the pain are most marked, though for obvious reasons the nitrate must act more powerfully upon the testicle while in a state of quiescence than when constantly moved, however slightly.

Mr. Jordan has informed me that he still pursues the same treatment, having every reason to be satisfied with it. It seem to me to be only just to him to give this very satisfactory proof of the value of the treatment which he originally suggested.—Fred'k W. Lowndes, M. R. C. S., in *Lancet.*

A New Method of Reducing Hernia (Spontaneous Reposition).—If a loop of intestine be pushed through a small loop of rubber and injected (*e. g.* by a catheter in one intestinal end) the intestine will distend, but no amount of pressure can drive the water from the other end of the gut. The water will, however, easily flow out on slight traction of the free end of the intestine. It is often found in a cadaver that a hernia, irreducible *intra viam* by taxis, yields readily to slight pulling on the efferent end.

There are various ancient methods of reduction based on this principle—hanging the patient by the heels, suspending from the legs thrown over a nurse's shoulder, etc. These may have been more efficient by causing the subject to faint. These methods had little value, because to make traction effective, the parts must be relaxed, *i. e.*, whatever constitutes at the time the abdominal floor must not be hard or tense.

The best conditions—relaxation of wall with greatest negative pressure—are secured by the knee-shoulder position. Renauleme once recommended taxis in the knee-shoulder position, but this was soon forgotten.

Previous emptying of the stomach, bladder and rectum favors negative pressure. This position may be rendered still more effective by placing a cushion under the knees and rotating the leg on the affected side outwards (thus, according to Hyrtl, enlarging the external inguinal opening).

The difference in pressure between abdominal and hernial cavities aspirates the sac, leading gradually to a return of the sac contents (at first of the intestinal contents and circulatory fluids). Even a slight reduction in the quantity of the same, greatly facilitates the return of the remaining parts. Some traction is at the same time exerted. These forces act primarily on the internal opening and are consequently much more effective than manipulation, which acts first on the external.

Cases 1 and 2. Incarcerated inguinal hernia. All the older methods tried in narcosis. Spontaneous reduction, in a little while, about 20 minutes by this method. (3) Incarceration. Incomplete reduction in like manner—sufficient to leave the gut permeable (4) A large, old scrotal hernia, not completely reducible in the dorsal position, went back readily in this way. (5) Incarcerated crural hernia in an old woman. Self-reduction after twice placing in this position for three-quarters of an hour, alternating with Sim's lateral position. (6) Old man with cardiac trouble. Incarcerated for 36 hours. Prolonged taxis. Knee-shoulder position repeatedly during the night, although there was no change the next morning, yet manipulation now succeeded. (7) Incarcerated inguinal hernia in a young man. After he was twice in this position for three-quarters of an hour—Sims' position in the mean time—it had become so soft that the patient pushed it back himself. (8) Irreducible crural hernia (fæcal incarceration). After this position had been retained several hours the symptoms subsided and the gut became permeable. In three cases of internal incarceration this procedure proved of no avail.—K. Nickolaus (Baden) in the *Cent. f. Chirg.—Annals of Surgery.*

The Treatment of Erysipelas by Benzoate of Sodium.—Many and various are the methods which have from time to time been vaunted as specifics, or at least as invaluable aids, in the treatment of erysipelas. Of all these the antiseptic methods have found most favor in recent times. External applications of tar and of carbolic acid, subcutaneous injections of carbolic acid, and multiple incisions and scarifications, designed to permit of ready access of the antiseptic remedies to the diseased parts, may be mentioned as the most direct

methods. Other and less disagreeable means of exhibiting antiseptics are through the stomach.

In the Centralblatt für Chirurgie, No. 19, 1886, Dr. Haberkorn speaks very highly of the internal administration of benzoate of sodium. He thinks this drug has been abandoned too rashly after the disappointment following its use in pulmonary phthisis, and believes that it is a very useful remedy in infectious diseases, more especially the exanthemata. He employs it in erysipelas in doses of from four to five drachms per diem, given in mucilaginous suspension or in seltzer water. In nearly every case in which the drug was so used, the temperature fell to the normal within forty-eight hours, and a corresponding improvement was noted in the other symptoms. No local applications were made at any time.

The number of cases thus treated was upward of fifty, and none resulted fatally. In two cases in which improvement was at first slow, a very favorable change occurred after the dose was increased. The patients do not manifest any aversion to taking the benzoate of sodium, and Dr. Haberkorn urges his hearers most strongly to make trial of a means so simple and yet, as he believes, so effectual.—*Med. Record*, July 31, 1886.

The Use of Benzoic and Salicylic Acids in the Treatment of the Typhoid State.—At the meeting on the 25th June of the Hospital Medical Society of Paris, M. Robin criticised the general antipyretic treatment, and proposed a new method. He asserts that the danger to the patient's life is due to the organism being encumbered with the broken-down incompletely oxidised organic products. These bodies are with difficulty eliminated, because of their slight solubility. To this theory of elimination M. Robin has given the name of "solution by combination." The principal medicinal agents used are salicylic and benzoic acids, which combine with the nitrogen radicles of the effete tissues and are carried off by the urine. M. Robin first tried the physiological action of bonzoic acid and the benzoates of soda on combustion, and gave them to healthy individuals for some days, who were fed on generous diet. The constant effect was a diminution of the solids excreted in the urine. This action M. Robin attributes to the benzoic acid lessening combustion. Afterwards he gave the benzoic acid in five typical cases, and found the amount of urine and contained solids to be increased in each case. The same result was obtained by salicylic acid and its salts. M. Robin makes further experiments with methyl, salicylic acid, etc., which he considers act in a similar manner to salicylic acid. M. Robin thinks in this treatment we have the best way of treating typhoid fever and typhoid states, which he considers are caused by the retention in the system of incompletely oxydized waste products.—*Medical Press and Circular*, July 21, 1886.

The Therapeutic Value of Coca Preparations in Children.—In a paper read before the association of German physicians and philosophers in Strasburg, Dr. Richard, pathologist, of Halle, presented the following conclusions from his experience in the use of coca with children:

The tincture of coca, in doses of from five to twenty drops every two hours, according to the age of the child, has proven of advantage in stomach and bowel diseases; and even in doubtful cases of cholera nostras the vomiting and purging cease after from fifty to a hundred drops have been given. The diet is not to be neglected. Doubtless in these cases the alcohol contained in the tincture is to be credited with part of the success.

In diseases of the respiratory organs tincture of coca is without influence.

The extract of coca, given in conditions of spasm not caused by anatomical derangements of the nerve centres, as in hysteria and epilepsy, is in some cases of advantage and in others of none.

The extract of coca is more active than the tincture. After the use of the extract children complain of dullness and a peculiar feeling about the head, with costiveness.

Great service was rendered by penciling the pharynx with a five- to ten-per-cent. solution of cocaine in different forms of angina. Pain and difficulty of swallowing ceased, and reflex irritability is considerably lowered. In whooping-cough remarkable success was obtained, where penciling the pharynx three times daily with a five-per-cent. solution has been sufficient to reduce paroxysms coming on twenty times a day to three or four in the twenty-four hours.—*The American Practitioner and News.*

A New Method of Treating Pneumonia.—R. Lepine (*Lyon Medical*), recognizing the infectious nature of pneumonia, assumes that there are two ways of treating that disease: one by supporting the patient (with alcohol) and tiding him over the attack, the other by acting on the offensive, attacking the belligerents at their point of invasion and endeavoring to annihilate them. R. Lepine has been carrying on the latter mode of warfare during a year, and has met with such success that he wishes to put it before the profession for trial. His method of procedure is as follows: With a long needle of a Pravaz syringe he penetrates an intercostal space, to the depth of 2 to 3 centimetres, into the hepatized portions of the lung, then immediately applies the syringe to the cannula and injects 20-centimetre cubes of some medicated fluid; the needle is then withdrawn a short distance and made to enter another portion of the lung in the immediate vicinity, and the same quantity of fluid injected. This is repeated until four or five injections are made. He has experimented with several medicated solutions, and has had the best results with one of bichloride of mercury (1 in 20,000). The solution of bichloride of this strength he found was not at all irritating to the lung tissue. The only precaution necessary in making the injections is not to penetrate the lung near the root for fear of injuring the large vessels. The author has never seen an untoward symptoms follow the injections, but has always observed a marked improvement in all the symptoms.—*New York Medical Journal*, August 14, 1886.

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Original Articles.

PERMANGANATE OF POTASSIUM IN AMENORRHŒA.*

BY SAMUEL BELL, M. D., OF PORT HOPE.

In order that I may present the subject in as intelligent a manner as possible, and in as brief a period as is convenient, I shall give a *resumé* of some of the different forms of amenorrhœa, with a recapitulation of a few cases which have come under my own observation, in conjunction with the testimony and experience of men of recognized authority on the above subject with this comparatively new remedy.

Amenorrhœa may or may not arise from some pathological condition. Sufficient for our present purpose, we shall divide it into two general varieties: First, *menstruatio suppressa;* second, *menstruatio retenta.* In either of the above conditions there exists no hindrance to the outlet of the menses. Retained menstruation may be partial or complete; suppressed menstruation is a condition where normal menstruation is suddenly suspended, the cause not always recognizable. When functional amenorrhœa exists, the organs of generation are generally in a healthy condition. Cases occur in the practice of every physician with a history of wet feet or improper exposure at the period of menstruation, and, as a result, total suppression follows, which may be permanent, and undermine the health of the most robust young woman.

Another patient may give the history of fright, sudden emotional disturbance, as in the case recorded by DR. EMMET in his valuable work, of a woman at the age of thirty years whose menstruation was arrested by the announcement of the death of her husband; although apparently in good health, menstruation never occurred again, and atrophy of the uterus was the result. Anæmic patients, as a rule, are predisposed to amenorrhœa, but it does not always accompany an anæmic condition, since profuse menstruatiom occurs in the early stages of phthisis and other diseases.

DR. EMMET favors the hypothesis strongly that when a sudden suppression of the menses takes place from wet feet, exposure, cold, or emotional disturbance, it should be accepted as evidence that there exists a previous depression of innervation which has rendered the system too feeble to react from the shock, which, like a thunderbolt, exhausts its whole force on the sexual ganglia or nerve centres; consequently, being so overwhelmed, they cease to emit their normal influence. If this hypothesis be the correct one, and it evidently seems the most rational, and in line with the experience and testimony of many capable of forming an intelligent opinion, why is our literature flooded with so many formulæ of our so-called emmenagogues, which from their *modus operandi* cannot do more than cause a temporary congestion of the organs of generation? Amenorrhœa is evidently only a symptom of some morbid condition, and any treatment which does not aim at the general condition seems, to say the least, to be unscientific. Many cases present themselves to us for treatment, with a history of functional derangement of the generative organs, the system in general in a normal condition. If the treatment with emmenagogues is at all justifiable, these cases seem to be the most suitable for such treatment. But I have had very poor success with the most improved forms or combinations of our so-called emmenagogues, and I believe such has been the experience of the profession, to a large extent. Consequently the announcement made by DRS. MURRELL and RINGER in 1883, through the medium of the London Lancet, to the profession, that they had found in permanganate of potassium a very useful remedy in certain forms of amenorrhœa, was received with considerable enthusiasm by the profession in Europe and America.

Their first report contained sixty-nine cases treated with this drug. Their most beneficial results were obtained from young women between the ages of eighteen and twenty-five years, who from some accident or trivial cause, such as getting wet and taking cold, had missed once or twice after being regular. In these cases the administration of the permanganate for a few days previous to the expected flow, was followed with almost certain results. In some cases the periods were brought on after an interval of a year had elapsed without any flow. In cases also of young girls coming from the country to the city to attend school, and who had seen nothing since the change of situation, it succeeded admirably after other emmenagogues had failed. Also in cases where

*A paper, read before the Michigan State Medical Society, at its meeting at Jackson, June 10, 1886.

girls had menstruated a few times and stopped, it had succeeded equally well; but in girls who had never menstruated its action was less certain. In other cases where the general health was below par, it did not succeed until after the patients had been sent to the country for a time, and in some others it failed altogether.

My individual experience with the drug is limited to four cases, three of which were cured and one not apparently benefitted.

Case 1.—Miss M., æt. 16 years, brought to me by her landlady, with the following history: She had menstruated a few times, but during the last six months had not "seen anything." She with her parents had recently removed from Canada, and were all constitutionally strong. She complained of a feeling of lassitude, easily wearied, and pains in the abdominal region at frequent intervals. I prescribed permanganate of potassium, 2 grs. in capsule after meals, with subsequent draughts of water, to be taken one week previous to expected monthly molimen. Nausea supervened, but by a reduction of the dose for a time, with perseverance of the patient, we were enabled to continue the remedy, and on the sixth day after beginning the treatment menstruation began, and proceeded normally, and has done so ever since, which is one year.

Case 2.—Mrs. M., æt. 22, gave the following history: Had been married six months. Had not menstruated for five months (pregnancy excluded). Two years previous had suffered with a severe attack of malarial fever. Subsequently her menses did not appear for upwards of a year, without any grave constitutional symptoms. She is a person of more than ordinary intelligence. At present she complains of inability for physical or mental exertion, and anorexia. During the time in which her menses should appear, she feels a load or weight in the abdominal region, with frequent pains. Her complexion is sanguine, and her system not suffering from any organic disease. I ordered permanganate of potassium, 2 grs. capsule *ter die*, with directions to take frequent libations of cold water; to begin one week before expected menstrual molimen. The drug at once caused nausea and epigastric pain, a sufficient amount not being retained to be of any benefit. She was ordered to continue the permanganate in one-grain doses three times a day, until one week before her next regular menstrual period, and then to increase the dose to two grains, if the stomach would retain that amount. The orders were carried out rigidly, and with good results, her flow coming on at the regular time. She has continued taking the drug in small doses one week previous to menstruation, with satisfactory results.

Case 3.—Miss R., æt. 17, was brought to me by her mother with a history of non-menstruation. She had always enjoyed good health, except a severe attack of acute rheumatism when fourteen years old. She was a well nourished person, and otherwise in a healthy condition. There was no obstruction to the exit per vaginam. Emmenagogue pills were given, and other remedial agents used, with no apparent benefit. Subsequently potassium permanganate was given—one grain three times a day, and increased to two grains as could be retained by the stomach. This treatment was continued for three months, with no improvement in her menstrual condition. All treatment was abandoned, and in six months menstruation began without treatment. With the exception of a recurrence of the rheumatism, she is in a healthy condition.

Case No. 4 was that of a young woman who had menstruated three or four times about one year previous to consultation, but had only menstruated three times during the year, and at irregular intervals. She came from a good family. She gave a history of palpitation and shortness of breath after very moderate exertion, and anorexia; her countenance was pale and anæmic. Potassium permanganate was ordered immediately, she just having passed three or four days her time of menstruation. Twenty two-grain capsules were prescribed, one three times a day, as in previous cases. She returned in a week wanting to know if she would continue the medicine, as it had the desired effect.

Dr. Lee O. Rogers, of San Francisco, reports a case of a young woman, aged 19, who had not menstruated from July, 1884, until March, 1885. Her abdomen became prominent; pregnancy was suspected, but physical examination proved her to be a "virgin." He immediately put her upon potassium permanganate, 2 grs., compressed tablets four times a day, to be followed by a large goblet full of water. Much nausea and vomiting followed its administration. On the fourth day of its administration the menses appeared, and lasted four days; she was sent home with directions to return, if menstruation did not proceed normally.

Dr. Billington, in the Medical Record of March, 1886, gives a report of four cases of functional derangement of the menses in young women, with three cures and one failure.

Dr. Bartholow, in the Medical News, reports the experience of a Russian physician, Dr. S. M. Laoff, who had obtained seven successful cases out of ten, treated with potassium permanganate.

Dr. E. J. Doering, of Chicago, published in the Examiner, 1885, a list of fourteen tabulated cases of amenorrhœa, showing eight successes and six failures; but in five of the failures, the drug was only given in one-grain doses, three or four times a day, while in the successful ones two, three and four grains were given, three or four times a day; but the larger doses

invariably produced a gastric disturbance and substernal pain.

DR. FORDYCE BARKER, in his report to the New York Academy of Medicine recently, briefly gives a *resumé* of the class of cases in which he has found it most useful.

First class: Young ladies who come from the country to finish their education, between the ages of fourteen and nineteen years. Home-sickness, entire change of life, over-tax of their mental power from unwarranted ambition in themselves or their teachers.

Second class: Ladies either single or married, who suffer from sea-sickness during a sea-voyage, having left some European port a few days previous to menstruation; with such cases, amenorrhœa is almost sure to follow.

Third class: Ladies between thirty and forty years of age, generally married, some of whom have borne children, who rapidly begin to gain in flesh, grow stout, and at the same time menstruation gradually decreases, both as regards time and quantity, until at last it is a mere pretense. This is generally attended with nervous disturbance, pelvic weight, sometimes hemorrhoids and moral depression. DR. BARKER opportunely states that it requires some moral courage, on his part, to boldly avow, that never in the above class of cases that he has prescribed permanganate of potassium, has he known it to fail. DR. BARKER makes the above assertion or explanation, with the qualification only, viz: The above classes of cases, in which he had prescribed, did not occur in his family practice (with the exception of two), but came to him for the special treatment of amenorrhœa from different parts of the country. DR. BARKER closes his interesting letter with the following statement: "All may judge how much weight should be attached to my clinical experience. I will add, that I find on the stubs of my office prescription-book I have prescribed permanganate of potassium forty-four times since November, 1884, which exactly represents the number of cases of the groups mentioned. At the present time, I cannot recall one instance of a domicile visit."

DR. T. GAILLARD THOMAS gives his experience in a few trite sentences: "I have used manganese freely ever since its introduction by RINGER. Thus far, no perfect emmenagogue has been discovered, but I regard manganese as the best that I have met with. It should be styled a regulator of menstruation, rather than an emmenagogue, for it is useful in absence of menses, irregularity of their recurrence, and even in excess of flow. I give two grains three times a day throughout the month, and during the period. I also use it in chlorosis and anæmia, and think that by its use I obtain better results than with iron. Knowing how apt the medical mind is to give way to enthusiasm, with reference to new remedies, I have spoken guardedly of this one. But I do not wish to 'damn it by faint praise,' while I recognize that it is, like all other medicines, very uncertain; in such cases as I have mentioned, I look upon it as a very valuable addition to the pharmacopœia."

DR. ALEX J. C. SKENE, in reply to my inquiries with reference to his experience, wrote as follows:

"My experience with permanganate in amenorrhœa has been rather disappointing. I have faithfully used it, but cannot indorse the terms in which several distinguished gynæcologists have spoken of it as an emmenagogue. I believe it should be ranked in the same class *below* iron. In some cases with me its use for weeks and months has apparently produced no effect; in others it seemed to act very well."

The last experience that I shall offer is that of DR. PAUL F. MUNDÉ, of the New York Polyclinic: "My attention was called to this new remedy soon after its introduction into practice by RINGER, and I was induced to give it an early trial, as my experience with other medicinal emmenagogues had been exceedingly unsatisfactory. Indeed, I had arrived at the point of discarding the familiar remedies, saline, rue, tansy, gossypium, etc., and of relying almost exclusively on local treatment, counter-irritation, scarification, and leeches to the cervix, and intra-uterine and ovarian galvanization and faradization. I began with the potassic permanganate, using it in pills and capsules, gr. j to ij after each meal, during the whole inter-menstrual period. I soon discontinued the solid form, because I was informed that the remedy was liable to decompose in that shape. I therefore used it in solution for a time, prescribing ℥ j to ℨ j of distilled water, of which ten drops were to be put into a tumbler of water, and drank immediately after eating, followed at once by thorough washing of the mouth. No discoloration of the teeth was produced by the solution used in this strength, and the taste was not particularly unpleasant. About two grains were thus given at each dose. Patients did not object greatly to this medicine at first, but soon complained of the amount of fluid they had to swallow three times a day, and of increasing dyspeptic symptoms; and hence, after several months' trial, I was beginning to fear that the chemical difficulties of administration of the remedy might interfere with its popularization. The introduction of the pills of the binoxide of manganese seemed to offer an elegant, tasteless, indestructible and efficient substitute. I have used the ij gr. pills in numerous cases, giving one or two pills three times a day after each meal; one, if the remedy was continued through the whole month: one or two, if it was given only during the week preceding the expected menstruation, and have found it certainly quite as efficient, and, I

think, less injurious to the stomach than the permanganate of potash. My experience extends to at least fifty cases. I have kept no record, but I think the number not much below one hundred in round numbers, for the cases in which I have employed the remedy during the past three years in private practice, and particularly at the polyclinic have been quite common. My experience may be formulated as follows:

"In amenorrhœa due to chlorosis, anæmia, or to change of climate (as in servant girls immigrating to this country), the manganese has acted as a general tonic, similar to iron, with an apparent especial influence on the sexual organs, so that after one month, usually after two months' use, menstruation has reappeared. Though at first scanty, a continuance of the remedy has resulted in re-establishment of the regular flow, and gradually the administration was limited to one week before the expected period. How much improved nutrition and acclimatization may have aided in this result, I cannot say.

"Amenorrhœa apparently due to deficient ovarian innervation, as so frequently occurs in stout, flabby, often sterile women, was but little benefitted by the manganese. Plethoric women, with sluggish portal circulation, cold hands and feet, who were in the habit of skipping one or more periods without apparent cause, and who were constantly in fear of having conceived, were generally much relieved at seeing their flow reappear after from several days' to a week's use of from six to twelve grains of manganese binoxide daily.

"On several occasions, merely to temporize until I could make a positive diagnosis, and to quiet the patients, I gave manganese without the slightest effect, until a subsequent examination revealed pregnancy. It is not, therefore, abortifacient.

"In the unexpected temporary suppression, from cold, nervous shock, or unexplained causes, manganese can usually be depended on to restore the natural flow within two or three days, twelve grains being given daily. I do not recollect being told that in any case the flow was excessive or painful where it was not so before, but a scanty flow was almost always increased by the remedy. In conclusion I must, however, emphasize most particularly one disagreeable feature of the remedy, namely, its frequent unreliability. While in many cases it would do all that was desired, in others, apparently identical, it would disappoint me by proving naught but an utter failure. I recollect two cases this winter, both suppression of several months' standing, in plethoric, sluggish women, wherein three or four days' use it brought on a natural flow, greatly to the delight of the ladies, who were correspondingly disappointed when at the next period a week's administration was entirely inefficient.

"My conclusion is that manganese is particularly useful in cases of anæmia where a general tonic is needed, and in cases of temporary suppression, and that it exerts, in many instances, a specific action on the *female sexual organs*, but that it is an uncertain remedy, which may fail under apparently the same conditions where it formerly succeeded. Finally, it is not injurious unless used in too large doses, and does not produce abortion. Its great objections are unreliability and tendency to cause *gastric disturbance*."

I shall summarize briefly the classes of cases in which manganese may be used with good results, with comparatively few exceptions:

First class: Young ladies between the ages of sixteen and twenty-two years, who are chlorotic or anæmic, the blood deficient in red corpuscles, tissue metamorphose progressing slowly, a condition of general debility present; cases in which a general tonic is indicated.

Second class: Married women between the ages of twenty-five and forty years, who may or may not have borne children, menstruation gradually diminishes, becomes irregular, and finally nothing more than a mere "show." Corresponding with this condition, flesh rapidly increases; a feeling of increased weight in the pelvic region is experienced; quite frequently constipation and torpidity of the portal circulation, depraved appetite with mental depression.

Third class: Young girls or women having recently made a transatlantic voyage, change of climate, some coming from rural districts, and making their homes in large cities. The sudden transition of country life to the whirl and bustle of metropolitan life often causes an arrest of the menstrual flow; also young women leaving some foreign port just previous to expected menstruation; the latter condition, says Dr. Barker, is almost sure to arrest menstruation.

Questions, which seem pertinent for us to consider in connection with the subject, are:

First: Is the permanganate of potassium efficient in other forms of menstrual derangements, such as menorrhagia, dysmenorrhœa and metrorrhagia?

Second: Is the binoxide of manganese as effectual as permanganate of potassium?

Third: What is the most eligible form of administering the remedy, and to which of its component elements is its action due?

The Medical Record makes the following modifications of ancient saws, to suit the times: What can't be cured must be regularly treated at the regular rates. A cut in time saves nine, Ambulances alter cases.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, Aug. 2, 1886.

DR. E. J. DOERING, President, in the chair.
DR. L. L. MCARTHUR read a paper on

DIAGNOSIS AND TREATMENT OF HEPATIC ABSCESS.

DR. MCARTHUR divided the causes for abscess of the liver into intrinsic, or causes resident in the liver, and extrinsic, or causes external to and independent of the gland. To the former belong acute congestions (said to result from heat and cold), tumors, echinococci, biliary calculi, or lumbrici in bile ducts. To the latter, infective emboli, whether carried through the portal vein or hepatic artery, traumatisms, use of alcoholics in excess, high temperatures, surgical operations or lesions anywhere in tract of vena porta or its communications. All abscesses may be divided into idiopathic, infective or embolic and traumatic, in the order of their frequency respectively. First variety most frequently met with in tropics, and hitherto supposed to be due to high temperature irrespective of pathological conditions. DR. MCARTHUR believes them to be due generally to formation of biliary calculi. Most frequent abscess in this zone is the infective variety. Sources of infection are two: *Per arteriam hepaticum* and *per venam portam.* First arise most frequently in pyæmia. Aseptic surgery has lessened the number of these cases. We can readily see how abscess of the liver may ensue by infecting particles reaching the liver, when we remember all blood of the abdominal organs is returned to the general circulation via the liver. Hence, dysentery, ulcerations of the intestines, operations about anus and rectum, cystotomy, may cause abscess of the liver. Dysentery complicated the four cases he reported. The last variety of abscess, traumatic, comes from direct or indirect violence. The pain in abscess of the liver is severe according to the size of the abscess, its location in the liver, deeply seated or near the peritoneum, the amount of other tissues involved, lungs, stomach, pleura, etc., and its causation. When deeply seated may be symptoms only of "pus somewhere," chills, fever, sweating, etc., with general malaise. Locally, generally sense of weight and uneasiness on jolting. Tenderness variable, usually increase in hepatic area, and bulging of side. Temperature not often high, except when peritonitis; then present an important symptom, a peritoneal friction sound. This is hardly mentioned in literature, and yet is worthy of remembering. Care should be taken to differentiate between pleurisy, or pneumonia of right lower lobe and hepatic abscess opening in this direction. Surgical interference by VOLCKMANN'S or GRAVES' method should be made as soon as possible. In the following cases two were operated upon and recovered; in the third the expectant treatment was followed and death ensued; in the fourth case a diagnosis was not made because of absence of characteristic symptoms.

On concluding his paper DR. MCARTHUR gave the following verbal report of cases: The first he gave was a man, 35 years old, formerly strong and healthy, weighing 160 pounds, a roustabout. Family history good. Four years previous to coming under my observation, while in Louisiana, he had had hepatitis with enlarged liver, from malaria. He was engaged when taken in present illness in unloading a cargo of peaches. He ate freely of them, and acute diarrhœa ensued, which became dysenteric in character. One week prior to admission to the hospital he complained of pain in the hepatic area. At the time of his admission his general nutrition was good, temp. 103, complained of tenderness in the hepatic area, had diarrhœa. On making an examination I found the hepatic area enlarged, with tenderness over it, slight redness of the integument over the right lobe of the liver. On completing the auscultation of the lungs I placed my stethoscope over the liver and heard a very distinct friction sound which characterized the invasion of the peritoneum in inflammation. Three days later a hypodermic syringe was introduced into the liver and pus, and a sero-purulent fluid withdrawn, and the diagnosis of abscess of the liver was completed. As soon as the friction sound had ceased, that is, when adhesion had taken place, an operation was performed by making an incision about two inches in length and carefully dividing the tissues until the peritoneum was reached and the adhesions found; when the abscess was opened, the contents evacuated and a drainage tube inserted. The man was discharged cured in the course of forty-two days. The second case was a man formerly in good health; family history good. He came to the hospital complaining of fever, disagreeable taste in the mouth, pain in the right shoulder and down the back. Normal heart and lung sounds, except on the right side, where there was evidence of commencing pneumonia in the right lower lobe. Marked enlargement of liver in the right hepatic area. In this case the attending physician advised the expectant treatment, hoping that the suspected abscess would open through the lungs, and a cure be affected in that way. In ten days the man died and a large abscess was found in the liver filled with normally appearing pus, complicated by circumscribed pneumonia and diaphragmatic pleurisy, showing the efforts of nature to get rid of the pus in a natural way. The third case was one in which the abscess

was deeply situated in the liver substance. There was no local tenderness, no enlargement of the liver, only the sensation of pus somewhere, with rigors, fever, chills and sweating. There had also been a diarrhœa. He finally succumbed to blood-poisoning. Post-mortem showed an abscess in liver. The fourth case was in St. Luke's Hospital, and was operated upon and recovered.

DR. FRANK BILLINGS, upon invitation, said: I probably have had less experience with living patients with abscess of the liver than anyone present, and consequently have less that is practical to say about it. While in Vienna I saw a great number of autopsies of abscesses of the liver. Several cases occurred in the wards, but no diagnosis of abscess was made, the patients suffering from what appeared to be intermittent fever, and usually a diagnosis of that kind was made. A curious thing to me was the fact that a great number of these abscesses were found in new-born children. In Vienna, one often sees in the dead-house abscesses which were the result of badly attended cord. The pus had formed in the vein and the inflammation spread upward, finally producing abscess in the liver.

DR. H. A. JOHNSON said: While listening to this paper, a somewhat unusual case was recalled to my mind which occurred in the County Hospital when we were down on 18th street. This was a case of abscess in the left lobe of the liver which had communicated, evidently some time before death, with the left lung, and was discharged through the bronchus. When the case came into the hospital it presented all the signs of empyema and the complication of the abscess with the liver was only discovered in the dead-house. Another case occurred to me in which there was abscess in the right lobe of the liver discharging through the right lung. The patient recovered, but five or six years after a recurrence of the abscess took place, and it discharged into the vena cava, producing instant death. Post-mortem revealed the cavity of the abscess communicating with the vena cava. Both of these cases seemed to me to be somewhat out of the history of abscesses.

DR. J. J. M. ANGEAR said: In all cases that I have seen the discharge had a fearful odor, and I began to think that if the pus did not have that odor, I should hav doubts of its being an abscess of the liver.

DR. J. A. ROBISON said: I have just had in the County Hospital a case of abscess of the liver in which the diagnosis was made only after death. The remark of DR. BILLINGS, that abscess of the liver is often diagnosticated as malaria, leads me to speak of it. The case was that of a woman who had been ill for several months. When I first saw her in the hospital, about a month ago, she was greatly emaciated, jaundiced, and complaining a great deal of pain in the hypogastric region. The liver was not enlarged, temperature ranged from 100 to 102, she had chills every few days, and it was supposed they were due to malaria. She finally died of exhaustion.

There was no diarrhœa, but there was great tenderness over the hypogastric region together with general jaundice. There was also a cachectic appearance which led me to believe there might be catarrhal inflammation of the duodenum which would account for the jaundice. But upon post mortem examination it was found to be a case of multiple abscess of the liver, with purulent inflammation of the gall ducts. I have in the hospital another case in which nearly all the signs that DR. MCARTHUR has spoken of here occurred. The patient is a woman about 40 years of age, in whom the area of liver dulness is greatly increased. Temperature 100, extremely jaundiced, and when she first came into the hospital I heard the friction sound as mentioned in the paper, but that has now disappeared. Since hearing this paper I am led to believe that we will find a large abscess of the liver in this case.

DR. JOHN BARTLETT said: At the time of the Mexican war, many of the soldiers returned affected with chronic diarrhœa. In seven of these cases which came under my observation, enormous abscesses of the liver followed. They were not opened, but were particularly examined in the dead-room, some of them containing at least a gallon of pus. As a general rule, the patients lived for months. About a year ago I was called to see a case in consultation. The man had been tread upon in a crowd and recived a slight injury about the epigastrium. Inflammation followed and abscess of the liver was diagnosticated, but owing to a difference of opinion among the consultants, no effort was made even to aspirate. After death, which followed in due course, multiple abscesses were found, one as large as a small cocoanut, another as large as an orange, and fifty other small ones. I mention this to prove how hopeless would have been an attempt to improve the condition of this man by aspiration. I saw another case of some interest: The man was shot and some weeks afterward died. I opened the body and found a piece of wadding and the bullet in the liver. The abscess was about as large as two fists, and opened into the vena porta. In another case I was called in consultaiton to see a man who appeared to have an affection of the liver. Both of the attending physicians thought it was a case of abscess. Presently he had symptoms indicating that there was some difficulty in the respiratory organs, and later, but in time to act if we had been more prompt, we discovered that there was a retro-pharyngeal abscess. I immediately

expressed the opinion that the abscess in the liver had opened into the anterior mediastinum. I deemed it inexpedient to open this abscess without having other instruments than we had with us. We went to get these and when we returned we were advised at the gate that the man had been taken with a difficulty of breathing, which simulated croup, and immediately expired. Upon examination we found that he had been drowned, as it were, by the pus from the bursting of the large abscess.

Dr. H. N. Moyer asked Dr. McArthur if in the literature on the subject he had seen anything in reference to the presence of acetone in these cases? Jaffey has laid down indications of diagnostic value when this substance is formed. He thought the symptoms might lead to the development of this substance in the urine, and that it might be of some diagnostic value, in suspected cases of abscess of the liver.

Dr. L. L. McArthur said, in closing the discussion, I was interested to learn of another source of abscess of the liver to be by infection from the umbilical cord, as related by Dr. Billings. Dr. Johnson's case of abscess of the liver breaking into the left pleura and the left lung is the only one I have known of. Rupture into the vena cava is also rare. To Dr. Angear I would say that in the cases I saw the discharge was odorless, and I emphasized that fact in the paper because the books all state that as a rule it possesses a very offensive odor, and is usually of a purulent character. In two of the cases I saw it was of a chocolate color, being mixed with blood and liver tissue. Dr. Robison speaks of a case as markedly jaundiced. This is set down as an exceedingly rare complication in abscess of the liver. He said that in his case the liver was found in post-mortem to contain multiple abscesses; I would like to ask if the cause was found? (Dr. Robison: We found no cause.) I would ask Dr. Bartlett if his case proved to be a case of abscess of liver with a mediastinal opening? (Dr. Bartlett: We presumed it to be hepatic, but no post-mortem was allowed.) As to acetone, I have seen no literature on the subject in connection with the liver. In those cases in which I used the hypodermic needle to make a diagnosis (three in number) two were operated on and recovered, the third was treated by the expectant treatment and died. No careful search was made for the puncture of the needle in the abscess of the liver. After the first two cases I became bold in the use of the hypodermic needle, and punctured for the fourth time in one case before I obtained the purulent matter.

Dr. Scott Helm read a paper entitled:

A SUBCUTANEOUS METHOD OF THE TREATMENT OF BUBOES.

His method consists in injecting the suppurating gland, after the pus has been withdrawn, with a solution of carbolic acid to wash out the cavity, and then injecting and allowing to remain an emulsion of iodol in pure oleic acid. The injecting instrument consists of a barrel holding two drams, which is mounted on either side by two rings for the fore and middle fingers, and a ring in the end of the piston for the thumb. Three needles, two different sizes of aspirator needles, and one a canula with trocar. To these is attached the centre joint, in which is a stop-cock, the opposite extremity of which is attached by a smooth joint to the barrel. In twenty-three cases the treatment was successful in all but the nineteenth, this patient having gone on a protracted spree following the operation. The advantages of the operation are that when there are two or more suppurating buboes in the same chain of lymphatics, the second or third appear further away from the initial one; by placing the first glandular abscess in a perfectly aseptic condition you prevent the inflammation of neighboring glands; secondly, there is no cicatrix remaining.

Dr. J. Zeisler: If conservative surgery has any place, I think it is in the treatment of buboes, and I think the final bad result of treating buboes by section might be avoided by carrying out the idea of Dr. Helm. It is a good idea to inject iodol, as it may be regarded as a specific against the venereal poisons, and there can be hardly a doubt that the suppuration is due generally to the poisons. I would like to know if the doctor has found it necessary to introduce this iodol emulsion more than once?

Dr. J. C. Paoli said: In the treatment of buboes of course the sooner we get out the pus the better, but those who have had experience with the treatment of buboes know that there are cases in which, in spite of aspirations and subcutaneous injections there is still a morbid process going on which produces mischief and ulceration of the tissues. I never use carbolic acid, but I have used a watery solution of permanganate of potash, $\frac{1}{2}$ gr. to 6 ounces, injecting it into the cavity. But we all know that we have cases of buboes which, in spite of all the skill of the physician, provoke the greatest suffering. I saw a case where the femoral artery had to be ligated. In temperate persons we have very tedious buboes. Again, where mercury has been used too freely there are often mischievous buboes. Very difficult cases are those in business men who are busy, active, and produce more congestion of the abscesses by their activity. But if we can get the patient to go to bed and rest we succeed better in our treatment. However, I think favorably of the subcutaneous method.

Dr. Frank asked Dr. Helm how many of these buboes were due to gonorrhœa and how many to chancres or chancroids, if any?

Dr. H. N. Pierce said: I had the pleasure of seeing Agnew, Jr., four years ago, experiment with the subcutaneous treatment of buboes. He first evacuated the pus by the use of the canula, then injected an antiseptic solution, washing it out and afterwards applying a compress bandage. The buboes generally went on from bad to worse, and he tried the same method over again but with no success, and finally he had to cut down upon them and treat them by the old method.

Dr. Scott Helm, in closing the discussion, said: I have made, in any case, only one injection, and the time that has elapsed before the patient was discharged has been from eight to fourteen days. In reply to Dr. Feder I would say that these buboes have been aspirated as early as possible, as soon as there was fluctuation. All the pus was removed and the cavity injected with a like quantity of the oleic acid emulsion of iodoform. I have had no case in which there has been a return of the disease in the same chain of glands. I had one case in which there was a bubo appeared some two weeks afterwards in the opposite groin, evidently due to gonorrhœa. In the second case, and the last one, which only occurred a few days ago and was not reported, the buboes were caused by gonorrhœa; all the others were due to chancroids.

Correspondence.

THE FARADIC CURRENT IN THE TREATMENT OF VOMITING DURING PARTURITION—EGG-AND-SALT POULTICE FOR MASTITIS.

Was called, at 8:30 a. m., August 26, 1886, to see Mrs. C., æt. 27. Found patient had had pains since 5:00 o'clock that morning.

As I entered the sick-room patient was having a good, solid labor pain. Pulse normal, and the patient being quite strong I flattered myself that I was going to have an easy time of it, but my anticipations all came to grief. Labor pains soon ceased and vomiting commenced, accompanied with severe pains in the back. The first emesis was of the contents of the stomach, then clear bile, which afterwards took on a stercoraceous odor.

Upon examination found waters had escaped and the first stage of labor was completed, child occupying the first position. I gave everything I could think of, or had ever heard of, but to no avail. Everything she would take between her lips would set her to "gagging." I was just about to administer chloroform when my eye rested on my little battery that I always take with me when I attend a case of confinement. It was already for use, should it be needed after the child was delivered. I seized this as a last resort, as things were beginning to look rather serious. I applied one electrode to the base of the brain and one to the pit of the stomach, and I don't think it was over three seconds before all vomiting ceased. Patient lay back exhausted, pains in the back all ceased, and she exclaimed: "Oh, doctor, I am so easy; my sickness in the stomach and pains in the back have all left me."

I then applied one electrode over the sacrum and one over the abdomen for about five minutes, and then removed the battery and awaited results. In about ten minutes labor pains (good solid pains) came on again, and in about twenty minutes more I delivered the woman of a still-born child of about three pounds weight.

The cord was hard and black and there seemed to be a constriction about every two inches, looking as though there had been a string tied around and drawn taut.

There was no pulsation in the cord and when I cut it only a few drops of black blood came away. From all appearances I think the child had been dead one or two weeks.

Placenta was about one-fourth the normal size, child was very poor and scrawny and looked as though it had never received proper nourishment. Upon questioning the patient if she had received any injury, such as a blow or a fall, she replied in the negative. Upon farther questioning, I found she had not felt life for about a week.

The second day after delivery the milk began to secrete, and the left breast became hard and very painful. I could not rub or press out any milk from that breast, and several cakes began to appear. Tried the breast-pump, but all to no avail. I ordered a poultice made by taking one egg and stirring enough common salt to make a thin paste, and apply every three hours until all the cake had disappeard and breast should become easy. Upon the application of the poultice pain ceased, cake and tenderness disappeared, milk began to flow, and there was no further trouble. Both breasts dried up, and patient made a good recovery.

My object in reporting this case is to call the attention of the profession to the use of the battery in vomiting during labor, and the poultice of egg and salt to the breast when they are threatened with abscess.

M. A. Cook, M. D.

Riley Centre, St. Clair Co., Mich.

Congratulations to Dr. I. N. Love, the mercurial editor of the Weekly Medical Review, on the addition to his *lares et penates* of a veritable little cupid. Avoirdupois, 13 lbs. This is, indeed, lovely, albeit we see no necessity for its being quite so large. It is big enough for twins.

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Editorial.

THE LIMITATIONS OF MEDICINE.

Doubtless those of our readers whose experience as medical practitioners dates back a quarter of a century, have witnessed a great change in their own conceptions of the power of medication unto the healing of the sick. In their neophyte days there were set opposite each disease numerous sure cures, and, panoplied with the armamentarium of a rich materia medica they went forth to conquering and to conquer with all the enthusiasm and confidence of youth. Time, however, wrought its strange mutations, and with the lapse of years there came a growing regard for nature, the kind old dame, with whose assistance patients recovered in spite of misdirected zeal. It is, nevertheless, a fact that much of the talk which we are accustomed to hear, of the inefficacy of medication, and the boasts of medical nihilism, is mere flippancy. While it is, unquestionably, true that too much is expected of drugs by the young practitioners, it is none the less a fact there are among them many "friends whose adoption has been tried" through experience, and which are "grappled to the soul with hooks of steel" by him who has seasoned his years of practice with brains, and conscience, and an observant eye.

As an illustration of the flippancy to which we have referred, we have before us an article by DR. G. M. DEWEY, in the Medical Record. He instances the fact that recent works on practice contain more on diagnosis and pathology, and less on therapeutics than those of a century ago, as evidence of the decline of therapeutics. This is a most unwarrantable inference. The fact argues rather that the vague generalities of a century ago have become crystallized, and that diffuseness has been consolidated into directness. He mentions, further, in illustration of the decadence of therapeutics, the fact that whole classes of remedies are left out of modern works on the subject; among them are lithontriptics, and he declares emmenagogues and expectorants to be on a decline. "Lithontriptics," it is true, have disappeared, but who will hold in this age of advanced knowledge of the chemistry of the secretions and excretions that their place has not been supplied with a treatment, hygienic and medical, which does infinitely more for the affections to which the older remedies were blindly directed, than was dreamt of a century ago? And notwithstanding MEIGS' satirical reference to emmenagogues as "hen-persuaders," it would argue very profound ignorance to hold that amenorrhœa is not vastly more susceptible to modern treatment than it was even a century ago. Expectorants, too: although they are no longer directed to pneumonitis it would be difficult for the therapeutic nihilist to convince the practitioner who is abreast of the knowledge of the age that they do not play an important part in the treatment of affections of the respiratory apparatus. "Some doctors," says our skeptical friend, "still believe that squills, ipecac, and senega possess some powers to get phlegm out of the lungs." Yes, indeed, the woods are full of just such doctors, and their practice, we warrant, would compare favorably in its results with that of the dilletante who prides himself on his disbelief in the efficacy of drugs.

"The better class of physicians," continues the writer, "are not expecting honors from prescriptions. FLINT was no drugger. HOLMES was a medical skeptic. BENNETT, before whom the dosers and druggers quail, says there are but four drugs known whose effects are unquestionably beneficial in particular diseases. They are: 1. Quinine in ague; 2. pitch ointment in psoriasis; 3, male shield fern in tapeworm; and 4, sulphur ointment in scabies." While we yield to none in our respect for the names quoted, we must still remember that FLINT and BENNETT were less qualified to speak on the subject of therapeutics than are thousands of practitioners of to-day who believe, for instance, that there is virtue in opium, mercury, belladonna, iron, digitalis, ipecac, iodide of potassium, cascara sagrada, permanganate of potassium, and at least a score of other drugs, without which they feel it would be a farce and even a fraud for them to pretend to treat disease. As for HOLMES, the dear old Autocrat, we will continue to love and honor him and his memory, but we will be excused if we refuse to regard him as an authority on therapeutics.

DR. DEWEY'S communication is, nevertheless, a piece of interesting reading, and contains some truths. The limits of our space forbid further criticism of it, and we shall be content with giving a few quotations without comment:

"When we cut out the confessedly incurable and the self-limited complaints, we have not got much to work on. The specialist claims what is left. Drugs intelligently used, I doubt not, have often greatly assisted nature in her extremity.

"Sulphate of quinine, while it is still prescribed by the routinist in typhoid fever, is eschewed by the more thoughtful men in the profession. Given day after day, to reduce a temperature which comes back day after day until the disease has run its course, was indeed very silly practice, to say nothing of its deleterious effect on the digestive and nervous systems.

"The United States Dispensatory contains eighteen hundred closely written pages, giving the virtues of innumerable drugs. Yet alcohol and opium are of more value than all the others combined. Opium has assuaged more pain, soothed more sorrows, and saved more lives than all the remedies in the materia medica. Good doctors father no prescriptions, no specifics.

"While RINGER is quoted as a believer in specific medication, while his book goes through semi-annual editions, his most vaunted remedies are for functional disorders. A good physician's highest hopes are realized when he has by opium assuaged pain, and by alcohol kept the heart wagging in the decline of some violent malady.

"If we have been nature's adjunct in her extremity, we have filled our mission.

"Alcohol, though slandered and villified by fanatics, has saved millions from an untimely end. There seems to be some inexplicable affinity between alcohol and the human system. The higher the civilization the more apparent the affinity. Noah, who built the mammoth ship that saved the world, felt its soothing influence; while Solomon, the wisest of mankind, like Mohammed, interdicting wine, fell the victim of a more ravishing vice.

"Noah's first thought, when his boat landed, was wine. He planted his vineyard before his corn or tobacco. The Bible says, "Give wine to him who is of sad heart, and strong drink to him who is ready to perish.' But as this is not a dissertation on prohibition, æsthetics, psychology, or divinity, I will not pursue this thought further.

"A doctor's faith in physic is the measure of his intellect. It is always in inverse proportion. Confidence in God and nature points to large comprehension.

"When we look upon the countless millions who have lived their allotted time undoctored and undrugged, our faith in physic weakens. With all our knowledge, all our skill, we give out at three score and ten. The divine appointment of death robs us of Utopian hope in drugs. Impossibility of proof of demonstration is at the bottom of endless controversy in medicine and divinity. We all agree about the multiplication table. Truth is mightier than lore—than authority.

"The strife between nature and art in the cure of disease has resulted in a victory for the former. Nature, unadvertised, has won a thousand trophies to one of art, whose seas of ink have been drained to prove one cure."

THE EVOLUTION OF HOMŒOPATHY.

The munificent donations of several of our wealthy citizens for the establishment of a hospital to be placed in charge of homœopathic practitioners, so-called, is calculated to direct renewed attention to this system of therapeutics, and to those who professedly practice it. Homœopathy as it was, and as it is, are two very distinct things, and it is rather creditable to the vast majority of those who sail under the Hahnemannian colors, that they regard the founder of their system as a crank, who, becoming possessed of one good idea, ran it into the ground. In homœopathy as enunciated by Hahnemann, the idea that force could be created by agitation, or that the potency of a drug could be increased by manipulation, was quite as essential as the law of similars. But since the establishment of the law of the correlation and conservation of force, the belief in the potentizing of a drug so conclusively argues that the person entertaining it is a fool, that the conception of the system by its intelligent practitioners no longer embraces fealty to the original dogma. There are, it is true, still a considerable number in the homœopathic ranks who profess to believe in Hahnemannianism as was originally promulgated by its author, but they are regarded by the more advanced of those bearing the name with a mingled feeling of pity and contempt. In the process of its evolution, it may be safely announced that the potency theory has been dropped from homœopathy.

There is, unquestionably, a tendency, strong and growing stronger, towards a more intimate professional relation between homœopaths, so-called, and the broad-minded general practitioner, or so-called regular. The chief obstacle to complete harmony in professional relationship lies in the attitude of the hide-bound members on either side. There are Bourbons in medicine as in politics, and their influence is not in the line of enlightenment and progress. Of the twenty, or more, practitioners in this city, who are popularly classed as homœopaths, there are not more than three or four who, on sign or card, or by any other method, declare themselves to be such. In the great majority of instances these gentlemen practice medicine on rational principles, with a leaning, however, to the belief that the law of *similia similibus curantur* is of extended application. To have suggested the possibility of a "regular's" meeting them in consultation, would, a short decade ago, have been heresy, but to-day gentlemen standing high in the counsels of the American Medical Association court the op-

portunity of thus meeting them. The world moves, and a decade hence we shall, doubtless, find associated with us in our societies, gentlemen who will be allowed perfect freedom in the matter of their conception of the manner in which a drug affects tissues or functions. When that day arrives such a thing as the establishment of a distinctively homœopathic hospital will not be thought of, for the persecution which has been the seed of the peculiar system will have ceased, and those who may hold different views touching the manner in which a drug acts in the production of its effect, will no longer be pariahs. If science do not operate in the broadening of the mind and the cultivation of charity, it must be as the sounding brass and the tinkling cymbal.

The leading homœopaths, so called, are placing themselves in an attitude which favors the union of all practitioners of the healing art into one fraternity. They have discarded the distinctive name and although the public applies it to them they themselves repudiate it. In New York there are many such and in this city they are not a few. We have no patience with the practitioner who while calling himself a homœopath is really eclectic in his practice, but we can see no sense or propriety or justice in condemning a physician because he may entertain different opinions from ours on a matter in which there is much room for difference of opinion.

In a recent address Dr. Bowditch, of Boston, gave utterance to the following sentiment in connection with his regret at the splitting up of the profession into "schools:" "We are *all*," he says, "members of a profession which, when regarded in its true light, above the plane of party strife and mere selfish gain, I regard as the finest and noblest of all, and the feeling grows stronger within me with each year of practice. There is that in it far above the mere desire and ability to cure disease—that which can soothe all regrets for possible failure and disappointment in our daily work—I mean the power of human sympathy; the power which bids the young mother silently and gratefully press the hand that helped her in her hours of trial; the power that impells the dying man, at the very last, to turn to him who, though powerless to save, yet by a word, a look, a touch of the hand, gives strength and courage to one just passing to that 'undiscovered country from whose bourne no traveller returns.' In the midst of discord and disappointment let us keep this thought before us, gentlemen, and at the end perhaps we may be permitted to see our past life, as it were, stretched before us, and feel that we have done our small share toward making our chosen profession what it should be—a blessing to all mankind."

When this sentiment shall have pervaded the profession the honor and pleasure of a membership therein will have become enhanced.

THE EDITOR'S READERS.

It is a trite saying that appreciation lightens the burden of labor. The shrewd employer treats his employees in conformity with this maxim, having learned through experience that honey catches more flies than vinegar. The same principle extends throughout the affairs of men, and its application in the matter of the relation between the medical editor and his readers is very apparent to the former. The reader is more largely responsible than he is apt to realize for the character of the journal which he reads. Gaillard's Medical Journal puts the matter thus aptly:

The subscriber cannot know how vastly important he is to the editor. In turn, he plays the part of confidant, critic, consoler, judge. Without him the editor's work in life would be absolutely valueless. Inspiration would cease; industry lapse into idleness; careful compilation would be but the rearing of a structure for the first idle wind to level to the ground, while editorial acumen would be as the flowers of the field, doomed to perish on the morrow. * * * * Many are the faults condoned by the good subscriber, and many the short-comings which he has overlooked; many the friendly hints which he gives to the editor, and the timely suggestions which he offers. May heaven bless and multiply him!

But there is also the delinquent subscriber. What is he to the editor? Does he know that it is his hand which has loaded the editor's life

with burdens heavy indeed, but which must be borne with a smile, and lifted with constant

lar physicians addressed themselves assiduously to the task of convincing the public of this city that there was a dearth of hospital accommodation for the poor people, and urged the necessity of the erection of a mammoth free hospital, to be supported by the contributions of wealthy citizens and railway corporations. Their efforts have finally succeeded beyond their expectations, Mr. Amos Chaffee having donated the site, and Messrs. James McMillan and John S. Newberry having contributed $100,000.00 each to the erection of the structure. The new hospital is, however, to be placed exclusively in charge of the homœopathic practitioners of the city. But, inasmuch as the philanthropic regular physicians above referred to, were stimulated to their task by a pure regard for the poor, their only regret will be that the unfortunate victims of poverty will be obliged to submit to *similia similibus* therapeutics. There are those who insinuate that had it been suspected that there was the remotest possibility of the poor being subjected to such indignity and danger, as a result of the eloquent pleas on their behalf, these eloquent pleas would bave remained for ever securely bottled up. But such insinuations are very uncharitable. It is much better that the poor should be housed and fed and treated even homœopathically, than that they should be permitted longer to suffer as they have been obliged to suffer for lo! so many years, in this city of churches, and hospitals and dispensaries, and poor commissions, and Associations of Charities, and city physicians. Of course it would have been infinitely better for them had they been able to secure the services of the philanthropic regular physicians who first discovered their deplorable condition, but they ought not to grumble. A gift horse should not be looked in the mouth.

Circular No. 2, of the Ninth International Medical Congress, has been issued. It is a sufficiently lengthy document to consume in its publication over five pages of the Age, and as it contains chiefly only the names of the various general officers of the Congress, and of the presidents, vice-presidents and secretaries of sections, we must be excused from reproducing it. It must suffice for us to state that the congress will convene in the City of Washington, D. C., on Monday, September 5th, 1887, and that its doors will be open to such members of the regular medical profession as shall have registered and paid their membership fee ($10). Each member thus registered will be entitled to a copy of the Transactions, when published by the executive committee. Physicians may anticipate the regular time of registration, commencing Sept. 1, 1887, by remitting the fee to the Secretary-General, Dr. John B. Hamilton, Supervising Surgeon-General, U. S. M. H. S., Washington, D. C. Ample arrangements will be made for social enjoyment, and ladies accompanying members will be invited to the social receptions, etc., which will be provided for.

The Michigan State Board of Health directs renewed attention, in a circular lately issued, to the State law which makes compulsory the report by physicians of communicable diseases, or diseases dangerous to the public health, coming under their charge. In this circular the board takes occasion also to announce that it regards typhoid fever as a communicable disease, and coming under the provisions of the State law, and that, therefore, houses in which it occurs are to be placarded after the same fashion as now obtains in the case of small-pox, cholera, diphtheria, and scarlet fever, diseases specifically mentioned as communicable in the Act. We apprehend that this classification of typhoid fever will not meet with any general endorsement, and it will be somewhat interesting when an attempt is made to prosecute a practitioner for failure to report a case of this disease to the health authorities. Will the dictum of the Board of Health, or the weight of professional opinion be received as the more conclusive testimony?

In a discussion of the conditions producing genius, now going on between a number of European psychologists, it is maintained that genius is a neurosis, and history is made to furnish numerous instances in which its appearance bore a very close relation to other distinct

nervous diseases. Cæsar, Peter the Great, Napoleon, and Charles V. were epileptics. Newton's nervous system was disordered, Pascal had hallucinations, and Luther threw an ink-bottle at the devil. Byron's parents were afflicted with ungovernable tempers and William the Conqueror was a son of Robert the Devil. Another singular fact brought out in discussion is that geniuses are, as a rule, sterile. Thus Dante, Michæl Angelo, Raphæl, Shakespeare, Cowper, Wordsworth, Byron, Scott and DeQuincey, either left no posterity or families which soon became extinct.

Dr. R. S. Harnden, of Waverly, N. Y., is of the opinion that the item on the incomes of practitioners in Canada, which has recently been going the rounds of the press, will do much good. He holds that there has been too much of this exaggeration of physicians' incomes, and that if journals and the press generally were to give the public the inside facts about us, we would be more apt to collect our bills promptly, and fewer would be discouraged on account of their comparatively insignificant incomes. There is much truth in this comment, and physicians are themselves chiefly responsible for the facts. In no other calling is the tendency to exaggerate in this direction so strong as in the medical profession.

The Kansas City Medical Index holds that it should be the medical editor's object in life to instruct, elevate and improve, rather than to entertain his readers. Occasionally, it says, a little fun is permissible—a flash of wit or a keen thrust—but such "stuff" as appears in a certain journal published in the diagonally opposite corner of its own State, should be frowned down. This sage comment of our contemporary follows closely one of its own efforts at being funny, and after wading through it, the reader will agree that there ought to be a statute prohibiting "fun" in medical journals. The Index is excellent as an instructor, elevator and improver, but as an entertainer, ———.

It is reported that the philanthropic medical gentlemen whose efforts on behalf of the poor of this city, have resulted in the endowment of a magnificent free hospital for the unfortunates, will contribute freely from their earnings to the support of the same. The selection of a staff of homœopathists will prevent them from donating their valuable services, but it will not prevent them from showing their love for the poor in other ways. Of course their services would be much more valuable, but being debarred from rendering these they will do the next best thing.

Daniel's Texas Medical Journal says that its exchanges for August are mostly as tame as stale cider, and attributes the fact to the dog-days, which, it declares stake all the life out of most people. Too true, brother. While those for whom we are supposed to write are off at some watering place, living like sybarites, making no effort themselves to give the journals zest and caring nothing for either our efforts or the results, we poor, jaded knights of the quill are obliged to toil and moil with the mercury in the 90's. This sort of thing cries aloud for reform. Awake, the reformer!

Puffendorf tells the following: "A man who had sore eyes went to a horse doctor for relief. The doctor applied to his eyes an ointment he was accustomed to use on horses. The man became blind, and sued the doctor, but the judge acquitted the horse-doctor, on the ground that if the man had not been an ass, he would never have applied for relief to a horse-doctor."

Children are being subjected to rather heroic treatment in some sections this summer, if the advice of some of the writers in the medical journals is being followed. One of these, for instance, advises that: "if the baby does not thrive on fresh milk it should be boiled." Another, in an article on nursing bottles, says: "When the baby has done sucking it should be unscrewed and hung up."

The Weekly Medical Review, in commenting on a recent note in these columns, to the effect that in India sickness is plentiful, fees are high and doctors are few, says the same might be said of h——l. Evidently, our contemporary does not believe in the doctrine of future punishment. Our brother's belief does not, however, affect the facts, albeit we have no desire to cause him any uneasiness.

The French have taste in all they do, while we must go without; nature to them has given goût; to us she's given gout.

Therapeutic Brevities.

Jambul in Diabetes.—In an interesting article on this remedy appearing in a recent number of the British and Colonial Druggist Wentworth Lascelles Scott, F. R. M. S., M. S. C. L., narrates some experiments bearing on the role played by jambul in diminishing sugar production in diabetes.

Powdered jambul, in 5-grain doses, pretty frequently given, having been credited (H. Banantokla, in Medical Record, 1883, p. 47), with the remarkable property—although elsewhere classed as a diuretic—of diminishing the renal secretion, and of arresting the formation of sugar in diabetes, it occurred to me that even a rough experiment made with the view

of ascertaining whether the seeds exerted any influence upon the conversion of feculaceous matter into sugar, might be better than none at all.

Some pure, dry rice-starch was weighed out in portions of 50 grains each, moistened to a thick cream, amidinized by being stirred into boiling water, and the ebullition continued for fifteen minutes afterwards. By means of a blank experiment, the quantity of a freshly-made, but rather weak, malt extract, capable of converting about half the starch, or 25 grs, into sugar at a temperature of 125° F., continued for 50 minutes precisely, was ascertained; that quantity, made up to 100-grain measures, was employed in each of the experiments mentioned below, the sugar formed being subsequently determined in the usual manner.

These are my results so far:

	I. Without Jambul.	II. With 15 grains Jambul.	III. With 25 grains Jambul.
Amount of starch converted into sugar.	22.4 grains.	9.8 grains.	6.3 grains.

That is to say, that while a certain quantity of diastatic matter converted 44.8 per cent. of the starch employed into sugar in 50 minutes normally, with the same material and in the same time, 19.6 per cent. was converted when 15 grains of jambul powder was also present, and only 12.6 per cent. when 25 grains of the seeds were present.

I would not venture to urge that these few and very imperfect experiments are sufficient to prove anything much either way, but as possible indications of the direction in which further and more carefully conducted researches should tend, I thought them not entirely devoid of interest. If they should be to any extent confirmed by future trials, it would appear as if jambul were not among the least promising of our possible new remedies.

Bichloride of Mercury and tincture of Belladonna in Membranous Croup.—I have for some years been in the habit of treating this disease with a combination of corrosive sublimate and belladonna. These drugs are recommended for this complaint in almost every work on therapeutics; but I am not aware that they have ever been given conjointly. I have found that small doses of the bichloride (one fiftieth of a grain), administered in conjunction with tincture of belladonna (two to five minims), every half-hour, for a child two years old, is a very successful method of dealing with this dangerous disease of childhood. The secret of its success is in its persistent administration, even when the symptoms are apparently most unfavorable. I have several times witnessed a happy termination to the disease when other practitioners with whom I was associated entertained scarcely a hope of recovery. It is advisable to commence the treatment by administering an emetic, so as to dislodge the already-formed membrane. Probably much of the benefit derived from this mixed treatment is due to belladonna, and it is astonishing what large doses of this drug children can tolerate. During the progress of the disease the strength must be maintained by a liberally nutritious diet and stimulants, for I must say that, when recovery takes place, the patient is left very anæmic and weak. This is not very apparent while the medicine is being given, as every evidence of it is partially masked by the physiological effects of the belladonna. —Dr. J. H. Jones in the *N. Y. Med. Journal.*

Belladonna in Sterility of Females.—There are few drugs which exhibit so pronounced a predilection to act upon certain structures of the body as belladonna. Among its favorite tissues, those of the female sexual organs may be mentioned. Its employment is followed by more or less benefit in every disease to which these parts are liable. I suppose it has fallen to the lot of almost every practitioner to be consulted by married women who never were pregnant, as to the cause of their barrenness. Apparently they enjoy the best of health, and have never suffered from any irregularity of the sexual apparatus. To such I have on several occasions prescribed belladonna internally, and have found that after taking the medicine for some weeks, they become pregnant. I have seen this happen so often that I am constrained to regard the occurrence as something more than accidental. I shall not venture to theorize upon its action, but will merely mention that I have observed that the external genitals become more relaxed, and the os and cervix uteri somewhat softened and pliable, during the treatment.—*Ibid.*

A Remedy for Tinnitus Aurium.—A. S. Patton, House Surgeon at St. Mark's Hospital, Dublin, Ireland, writes to the Medical Press as follows:

I have been, for the last eight months, using actea racemosa in cases of tinnitus aurium with very satisfactory results.

In many uncomplicated cases it effected a complete cure; whilst in complicated cases it very frequently diminishes it, sometimes abolishes it as long as the medicine continues to be taken, and sometimes permanently cures it.

By complicated cases, I mean those in which there is some disease of the middle or internal ear. I have been unable to find any indication in the nature of the cases as to when this drug

is likely to prove useful, but would recommend its being given an early trial.

The following is the prescription I use:

℞ Tr. cimicifugæ, ♏clx.
Aquam, ad ℥ ij.
M.—℥ j. t. d. s.

A Further Note on Ergot in Dysentery.—J. J. Curran, L.R.C.S.I., in the Med. Press and Circular reports the following case of dysentery in which ergot was employed with great benefit:

The patient had suffered from chronic dysentery for many months, and was seen by several medical men, the usual remedies being administered without effect. When I saw him he was quite anæmic from loss of blood, the discharges being very frequent, and almost entirely sanguineous. He was certainly in a very miserable condition, and had quite abandoned any hope of his recovery. It occurred to me that ergot ought at all events to lessen the bloody discharges, and I ordered him 20 minims of the liq. ext. every three hours, at the same time giving him a bland farinaceous diet. The effect was most satisfactory after three or four doses; the blood in the stools had quite disappeared, and at the end of a week the discharges entirely ceased. The patient then made a good recovery, and is now in excellent health.

For Atonic Dyspepsia.—Dr. J. Z Scott, of Scandia, Kansas, writes that during the past summer he has had quite a number of patients who were suffering from indigestion. When the patient feels full and uneasy for several hours after the meal is taken, when sleep is disturbed, or, perhaps, cannot be obtained, and when the digestive organs are found to have gone out on a "strike," he is in the habit of prescribing the following with excellent results:

℞ Acidi nitro hydrochlorici dil., ℥ i.
Tincturæ aurantii, ℥ ii.
Spts. chloroformi, ℥ iv.
Syr. limonem, q. s. ad ℥ iv.
M.

Sig. A teaspoonful three times a day before meals, in one-half wine-glass of water.

In the headaches of indigestion he follows Dr. Bartholow's advice, and gives citrate of caffeine with satisfactory results. In the peculiar drowsiness that sometimes follows a full dinner, he says it is almost a specific.

The Treatment of Burns.—Altschul (Monatsheft f. prakt. Dermat.; Therap. Gaz.) reviews the treatment of burns, and gives the results of his own experience. Iodoform he regards as the application *par excellence* for burns of the second and third degrees; he prefers an iodoform-gelatin of the strength of ten per cent., or, better still, an iodoform-paste, of which the following is the formula:

White bole, ½ drachm.
Olive oil, 1 ounce.
Sol. of subacetate of lead, 6 drachms.
Iodoform, from 2 to four drachms.

Galvanic Flannel.—A novel method of applying an electric current to the body forms the subject of a patent granted to the agent of Señor Pumariega, of Avile, Spain (2,322, 1882). The inventor steeps flannel in a bath composed of equal parts of oxide of iron, copper, zinc, and tin, mixed in fine powder with weak gum-water. The flannel thus takes up a quantity of the metallic oxides which are excited by the perspiration of the body, which is then subjected to a weak but constant electric current.

Painless Cautery.—It is said that a saturated solution of nitric acid and muriate of cocaine makes a painless cautery. In our hands the solution causes some pain, but little. It is strange to contrast the effect of the cocaine applied previous to the application of the acids and when it is used combined with the acids. In the first case it will require four or five minutes to get its physiological effect, and in the last we have the instant effect of the cocaine.—*Alabama Med. and Surg. Journal.*

Calomel as a Diuretic.—The use of calomel as a diuretic, has already been tried in various clinics. It is efficacious only when the kidneys are healthy. In some cases of heart disease, in which as yet no interstitial changes had occurred, calomel produced free diuresis where other means had failed. It is given in rather large doses, and salivation rarely follows. No explanation is given of its mode of action.

Syrup for Painful Teething.—Bouchut (L'Union Medicale, January 9, 1885) has had good results in painful teething from the following syrup rubbed on the gums four times daily:

℞ Cocaine muriate, } 1 part.
Sodium borate, }
Syr. marshmallow, 20 parts.
Syr. white poppy, 10 parts.
M.

—*Western Druggist.*

A New Method of Taking the Temperature.—Filatoff recommends that the temperature in children should be taken by previously warming the thermometer and then observing the degree of fall, instead of that of rise, of the mercury. The thermometer may be then placed in the axilla, and it is asserted that not more than two minutes are required for obtaining a very accurate record of the temperature.—*Med. Record*, Aug. 14, 1886.

An improvement in Maltine is announced by the Maltine Manufacturing Company. The product now furnished is not so viscid as that formerly in the market, and hence it is more easily administered. Among its new compounds, the company calls especial attention to one containing maltine and cascara sagrada, recommended as an efficient, safe and agreeable laxative combined with a valuable nutrient.—*N. Y. Med. Jour.*, July 3, '86.

For Myalgia.—Prof. Bartholow (Col. and Clin. Record) recommends for myalgia, the following liniment:

℞ Chloralis hydratis, ʒ i.
Linimenti saponis, ʒ ij.
M.

Medical Progress.

Pencils of Ointments and Pastes.—Pencils of stiff ointments, and others soluble in water, are largely employed in dermatological practice by Dr. P. G. Unna, of Hamburg (Monatsch. f. prakt. Dermat., 1886, No. 4; Ctrlbl. f. d. ges. Therap., July, 1886, p. 334). The ointment pencil (*Salbenstift*) is termed *stilus unguens*, and the paste pencil (*Pastenstift*) *stilus dilubilis*. The following formulæ are given.

Stilus acidi salicylici dilubilis:

Precipitated salicylic acid, 10 parts.
Powdered tragacanth, 5 parts.
Powdered starch, 30 parts.
Powdered dextrin, 35 parts.
Powdered white sugar, 20 parts.

This is of the strength of 10 per cent. The next formula is for a 40 per cent compound:

Precipitated salicylic acid, 40 parts.
Powdered tragacanth, 5 parts.
Powdered starch, 10 parts.
Powdered dextrin, 25 parts.
Powdered white sugar, 20 parts.

Stilus arsenico-sublimatus dilubilis:

Powdered arsenious acid, 10 parts.
Corrosive sublimate, 5 parts.
Powdered tragacanth, 5 parts.
Powdered starch, 30 parts.
Powdered dextrin, 30 parts.
Powdered sugar, 20 parts.

Stilus cocainæ dilubilis:

Cocaine hydrochloride, 5 parts.
Powdered tragacanth, 5 parts.
Powdered starch, 35 parts.
Powdered dextrin, 35 parts.
Powdered white sugar.

Stilus iodoformi dilubilis:

Iodoform, 40 parts.
Powdered tragacanth, 5 parts.
Powdered starch, 10 parts.
Powdered dextrin, 30 parts.
Powdered white sugar, 15 parts.

Stilus acidi pyrogallici dilubilis:

Pyrogallic acid, 40 parts.
Tragacanth, 5 parts.
Powdered starch, 13 parts.
Ethereal extract of orleana, 2 parts.
Dextrin, 20 parts.
Powdered white sugar, 20 parts.

Stilus resorcini dilubilis:

The purest resorcin, 40 parts.
Powdered tragacanth, 5 parts.
Pure starch, 10 parts.
Powdered dextrin, 25 parts.
Powdered white sugar, 20.

These mixtures are made into paste with a small amount of water, and the pencils are made of the size of an ordinary lead-pencil and of about the length of the finger. They may be coated with tin foil, and those containing a mercurial with collodion.

Stilus acidi borici unguens:

Boric acid, 20 parts.
Yellow wax, 40 parts.
Olive-oil, 35 parts.
Rosin, 5 parts.

Stilus cannabis unguens:

Extract of cannabis indica, 10 parts.
Rosin, 5 parts.
Yellow wax, 45 parts.
Olive-oil, 40 parts.

Stilus acidi salicylici unguens:

	40 per cent.	10 per cent.
Precipit'd salic. acid,	40 parts;	10 parts.
Rosin,	5 parts;	5 parts.
Yellow-wax,	25 parts;	45 parts.
Olive-oil,	30 parts;	40 parts.

Stilus chrysarobini unguens:

Chrysarobin, 30 parts.
Rosin, 5 parts.
Yellow wax, 35 parts.
Olive-oil, 30 parts.

Stilus hydrargyri oxidi rubri unguens:

Red oxide of mercury, 5 parts.
Powdered Venice soap, 10 parts.
Rosin, 5 parts.
Yellow wax, 40 parts.
Olive-oil, 40 parts.

Stilus iodoformi unguens:

Iodoform, 4 parts.
Rosin, 5 parts.
Yellow wax, 30 parts.
Olive-oil, 25 parts.

Stilus iodi unguens:

Pure iodine, 20 parts.
Rosin, 5 parts.
Yellow wax, 40 parts.
Olive-oil, 30 parts.

Stilus acidi progallici unguens:

Pyrogallic acid, 30 parts.
Rosin, 5 parts.
Ethereal extract of orleana, 2 parts.
Yellow wax, 35 parts.
Olive-oil, 28 parts.

Stilus resorcini unguens:

Pure resorcin, 30 parts.
Rosin, 5 parts.
Yellow wax, 35 parts.
Olive-oil, 30 parts.

Stilus saponis, picis et ichthyoli unguens:

Dry potash soap, 10 parts.
Pitch, 10 parts.
Sodium thioichthyolate, 5 parts.
Rosin, 5 parts.
Yellow wax, 40 parts.
Olive-oil, 30 parts.

Stilus sublimati unguens:

Powdered corrosive sublimate, 1 part.
Powdered Venice soap, 25 parts.
Rosin, 5 parts.
Yellow wax, 35 parts.
Olive-oil, 34 parts.

Stilus sulphuris unguens:

Precipitated sulphur, 20 parts.
Yellow wax, 40 parts.
Olive-oil, 35 parts.
Rosin, 5 parts.

Stilus zinci oxidi:

White oxide of zinc, 20 parts.
Yellow wax, 40 parts.
Rosin, 5 parts.
Olive-oil, 35 parts.

Stilus zinci sulphocarbolatis unguens:

Sulphocarbolate of zinc, 5 parts.
Powdered Venice soap, 15 parts.
Rosin, 5 parts.
Yellow wax, 40 parts.
Olive-oil, 35 parts.

—*The New York Med. Jour.*, Aug. 14, 1886.

ANTIFEBRIN — A NEW ANTIPYRETIC.— In the Centralblatt für klinische Medicin, for August 14th, DR. A. Cahn and DR. P. Hepp, assistants at Kussmaul's clinic at Strassburg, bring forward a new antipyretic agent that, if further experience bears out their statements, is somewhat remarkable. They state that the substance itself is not a new one, being the neutral principle known as acetanilide or phenylacetamide, the formula of which they give as $C_6H_5NHC_2H_3O$. The formula may otherwise be written $C_6H_5.N.(C_2H_3O).H=C_8H_9NO$. It is a white, crystalline, odorless powder, producing a slight burning sensation when placed on the tongue, almost insoluble in cold water, more readily soluble in hot water, and freely soluble in alcoholic liquids, including wine. It melts at 113° C., and boils unchanged at 292°. Besides possessing neither acid nor basic properties, it is indifferent to most reagents. Although closely related to aniline chemically, it is found not to cause poisonous effects when given to dogs and rabbits in comparatively large doses, nor did it affect their temperature.

On the human subject the authors have tried it in eight cases of typhoid fever, five of erysipelas, two of acute articular rheumatism, four of pulmonary phthisis, and one each of pulmonary abscess, leucæmia with fever, pyæmic fever consequent on cystitis and bed-sore, septicæmia, and ambulant pneumonia. The doses vary from four to fifteen grains, and thus far no more than thirty grains has been given in the period of twenty-four hours. The size of the dose needed cannot be told beforehand; as with other antipyretics, it depends on the nature, severity, and stage of the disease and on the peculiarities of the individual, but a given amount, such as four grains, is said to produce the same effect as four times the quantiy of antipyrine. The authors think it probable that decided remissions of fever are more likely to be produced by single large doses than by repeated small ones, although that has not yet been shown to be the case. Tabular statements are given of the temperature variations under the use of the drug in two cases of typhoid fever, a case of erysipelas of the leg with lymphangitis, and one of pulmonary phthisis. In two of these records the comparative action of acetanilide and of antipyrine may be noted.

Ordinarily the effect of "antifebrin" begins to show itself within an hour, reaches its maximum in about four hours, and lasts from three to ten hours, according to the size of the dose, but usually, provided the temperature has been brought down to or below the normal point, from six to eight hours. No chills have yet been observed, but, as in the case of antipyrine, in a few instances the patients felt cold. Hand in hand with the fall of temperature goes a notable lowering of the frequency of the pulse, associated with an increase in its volume, as ascertained with the sphygmograph. No unpleasant effect on the digestive organs has been observed; in a few instances the appetite returned, probably as a result of the temporary freedom from fever. In still other cases unusual thirst and diuresis were manifest during the remission. None of the patients complained of the drug; their general condition was perfectly good during the hours that they were free from fever. In one of the cases of rheumatism the articular pain, which had been severe, was allayed *pari passu* with the fever. At first the experimenters felt somewhat anxious on account of a pronounced cyanosis of the face and extremities in some of the patients, but this gradually disappeared and they ceased to

regard it with apprehension. In a few cases, as in the experiments on animals, the patients fell into a tranquil sleep during the remission.

Besides the efficiency of the drug in comparatively small doses, its advantages are said to be that it does not disturb the stomach, that the sweating it causes is relatively moderate, and that it is cheap. The authors warn their readers against the use of an impure article. They also mention as a matter of theoretical interest the fact that, while the other antipyretics are either phenols (such as carbolic acid, hydroquinone, resorcin, and salicylic acid) or bases of the quinoline group (including quinoline, kairine, antipyrine, thalline, and quinine), we have in acetanilide an indifferent body of widely different constitution. The authors have experimented with the acetyl derivatives of toluidine and naphthylamine, benzanilide, salicylanilide, and some other complex compounds, which they promise to report upon hereafter.—*N. Y. Med. Journal.*

Stigmata Maidis in Vesical Catarrh.—The tassel-like tufts or stigmata or green pistils of the Indian corn (Zea mays) or corn silk have been introduced into medicine during the last few years as a demulcent and diuretic in catarrhal inflammation of the bladder and kidneys. Its properties were made more widely known by Prof. Castan, of Montpellier, in 1880. Different results have been obtained by different observers, the fluid extract of the drug appearing to vary in strength according to the nature of the soil, the climate, the time and mode of picking, and the manner of drying the stigmata. I have, however, found the fluid extract of Parke, Davis & Co., of Detroit, as most constant and certain in its effects and action. In Mexico it has long been used in nephritic colic and vesical catarrh. According to Dr. Landrieux, under the action of this drug diuresis is rapidly produced. (This I found slightly in my first case and greatly in my second.) The pulse becomes regular; the arterial tension increases, and that of the veins diminishes. The drug is readily tolerated by the system, and in chronic cases its administration may be continued for a month or six weeks without the slightest inconvenience. No disturbing effect on the nervous system or digestive organs is experienced. Its chief value seems to be demulcent and diuretic in catarrhal affections of the kidneys and bladder, although anodyne properties have been claimed for it by M. Queriel, who observed that the pain was greatly relieved in nephritic colic after the use of the remedy. Prof. Castan has used the infusion with success in many cases of gravel, and has found much relief in nephritic colic. He also considers it to act as a local anodyne. Dr. L. W. Hansen found in a case of chronic inflammation of the bladder, accompanied with hemorrhoidal troubles, that a wineglassful of a decoction of the fresh stigmata every three hours cured the disease in ten days, and that after nearly four months there was no return of the disease. Dr. Defau states that in traumatic and gonorrhœal cystitis the drug acts markedly as a diuretic, but causes an increase of pain, and should not be employed in such cases. The best results obtained by him were in cases of uric or phosphatic gravel and chronic cystitis (whether simple or consecutive to gravel), and in mucous or muco-purulent catarrh. In such cases the vesical pains, dysuria, excretion of gravel, and ammoniacal odor disappeared under the use of the remedy. Cases are reported by Dr. Sassoon in L'Union Médicale in which the urine exhibited a strong ammoniacal odor, with heavy morbid deposits, which were speedily relieved by the application corn silk.

The stigmata maidis has also been employed with good results in cases of heart disease, albuminuria, and other affections requiring diuretics. In one case mentioned by M. Constantine Paul the quantity of urine excreted after the administration of three tablespoonfuls of the syrup rose from 500 to 1,000 grammes. In another case, mentioned by Dr. Landrieux, that of a woman aged sixty-eight, suffering from heart disease, who had considerable œdema of the lower extremities, enormous ascites, pulmonary and renal congestion, the quantity of urine excreted was increased by the use of this remedy from 200 to 800 grammes in the course of twenty-four hours, and the œdema and ascites shortly disappeared.

Dose and preparations.—An infusion is made with eight grains to a pint of boiling water, and a wineglassful taken every two or three hours. A syrup seems to be in France, however, the favorite mode of administration. A kilogramme of syrup is made of such a strength that it contains 25 per cent. of the extract, of which the best samples of stigmata yield an average of 27½ per cent. The dose of the syrup is two to four drachms, equivalent to one or two grains of the extract. I, however, prefer the fluid extract of Parke, Davis & Co., of the strength of the fluid extract of the U. S. Pharm.—one gramme to the cubic centimetre; the dose of which is one drachm every six hours.—Mr. G. St. George, *Lancet.*

[Mr. St. George narrates two cases of cystitis in which the fluid extract of stigmata maidis was administered with success.]

Acorn Cocoa in Chronic Diarrhœa of Children.—Dr. C. Hasenclever, assistant physician to the Augusta Hospital in Berlin, has published in the Deut. Med. Wochenschrift an interesting report on the successful treatment of the chronic diarrhœa of children by a new preparation of cocoa, consisting essentially of pure cocoa deprived of a large part of its fatty matter, and combined with a soluble extract of roasted acorns free from cellulose; a slight addition of roasted flour and of sugar is made to the cocoa in preparing the cocoa-powder, in order to insure the necessary conditions of a perfect beverage. It was employed for several months in a long series of cases (97 in number), being those of diarrhœa, mostly combined with vomiting. The children varied in age from seven months up to nine years. They were, for the most part, in a miserable condition from neglected diarrhœa. Seventeen cases were complicated with rachitis, and others of the children were suffering from chronic chest affections. Many of the children had been fed upon milk, and a great variety of infant foods, and the results reported are in the highest degree successful, the improvement being, in most instances, very quickly perceptible, and most

of the children being cured within eight days. In order to make the observations conclusive, no other food or medicine was allowed during the time of treatment than this, the acorn-cocoa, that is, cocoa prepared, as stated, with soluble extract of acorn. It was given either by the bottle or spoon. The formula for the preparation of the cocoa was furnished by PROFESSOR OSCAR LIEBREICH and DR. MICHAELIS.

This acorn-cacoa has a pleasant flavor, like that of chocolate; and the preparation was readily taken from the commencement, and continuously for any length of time, this being probably due to the slight astringent flavor of the cocoa. Of chocolate or cocoa alone, children will sometimes tire; but it was stated that the cocoa prepared in this way never palled upon the palate; and it is pointed out that tea and coffee, which are the only other beverages of which no one seems to tire, contain, in addition to the same alkaloid as that which is found in cocoa, a slight astringent, which the soluble acorn-extract furnishes. The great nutritive value of the cocoa, compared with tea and coffee, give it obvious advantages.

Several adult cases of diarrhœa and chronic gastric catarrh were similarly treated with great success by the acorn-cocoa. DR. HASENCLEVER observes that it has not yet been ascertained whether the valuable properties of this cocoa are due solely to its astringent influence or to its anti-fermentative character; but the careful observations made leave no doubt that the acorn-cocoa completely answers its purpose both as a remedy and a food in the treatment of chronic diarrhœa, and especially that of infants. DR. VON HOSSLING reports, in the Münchener Medicinische Wochenschrift, a trial in 19 patients in the out-patient department of the Children's Hospital at Munich, of the same food, with equally good effects. It seemed to have a remarkably good result in rapidly improving the condition of the children and their state of nutrition; and also in arresting the diarrhœa of phthisical patients. As a suitable food for children having a tendency to chronic diarrhœa, it is a great desideratum, and the result of these successful observations in Munich and Berlin has been to bring this acorn-cocoa into extensive use in Germany, both as a beverage for children and for adults. Our own experience is very favorable to it.

The name, perhaps, is not altogether well chosen, since the beverage is essentially cocoa, with addition only of a given quantity of the soluble extract of acorns. It promises to be a valuable addition to the range of dietetic articles, useful both in daily life and for the specific purposes indicated.—*British Medical Journal*, July, 1886.

JACCOUD ON THE TREATMENT OF GOUT.—In a recent number of the Bulletin général de thérapeutique we find an interesting summary, taken from Le Praticien, of a lecture on the treatment of gout, by PROFESSOR JACCOUD, originally published in La Thérapeutique contemporaine. It is only in the interval between the attacks, M. JACCOUD remarks, that the treatment of gouty persons is really of positive avail, and at that time, as well as with persons threatened with gout, the regimen is of prime importance, sobriety and regularity as to meals and sleep being the fundamental points. The diet should be mixed, but with the vegetable element predominating. Game, shell-fish, and salt-water fish should be avoided. Pure water is the best drink, but, if it is not well borne alone, some of the lightest white or red wines may be added to it, or weak beer may be used. A gouty person should go to bed early, rise early, and take moderate exercise. This hygienic treatment should be lifelong, and should be supplemented with the whey-cure every spring and autumn.

Where this alone does not suffice, M. JACCOUD first prescribes a mixture of equal parts of milk and some highly alkaline water, such as that of the cold springs of Vichy, to be taken for at least ten days in each month, three or four glasses daily. If this is not enough, benzoate of lithia is added, from eight to fifteen grains being given every day. Where there are repeated attacks of intestinal catarrh, with a tendency to fleshiness, a large teaspoonful of Carlsbad salt should be taken every morning, on getting out of bed, in half a glass of water, for five successive days, the course being repeated every fortnight. The dose may be increased or reduced according to the laxative effect produced. Carlsbad salt has the advantage over other purgatives that it increases the flow of urine, whereas with all the others, after three moderate but repeated purgations, the urine becomes scanty and concentrated.

Such oxidizing agents as permanganate of potassium, chlorate of potassium, and oxygen by inhalation, which have been used against the gouty disposition, have been shown to be without effect. As regards mineral waters, M. JACCOUD advises Vichy and Carlsbad for persons of a robust constitution, free from heart disease, and suffering from undisguised gout. Those who are not in such good condition will find advantages in a season at Ems or at Royat. Kissingen and Homburg are especially appropriate in cases of the articular affections left after the attacks. When there are manifestations of renal lithiasis, the patient should be referred to Conterxéville, Evian, Martigny, or Vittel. For old and enfeebled subjects the waters of Ragatz are best suited.

Proceeding to the treatment of the individual paroxysms—an affair of minor moment in M. JACCOUD'S opinion—he declares himself a partisan of the expectant plan as a general thing. Ordinarily he would limit interference to enjoining rest, wrapping the affected joints with cotton imbued with some anodyne liniment, and enforcing absolute or mitigated diet according as fever is present or absent. Milk is then the best article of food. Freedom of the bowels must be secured, but, if possible, without giving purgatives. It is only when the pain is exceptionally severe or the attack is unusually prolonged that M. JACCOUD thinks it well to give salicylate of sodium (forty-five grains a day) or small doses of wine of colchicum, amounting to a teaspoonful and a half in twenty-four hours.—*N. Y. Med. Journal.*

THE REMOTE EFFECTS OF REMEDIES.—The subject which DR. BROADBENT chose for his address as President of the Section of Medicine at the annual meeting, is one which, important as it is, can scarcely be said to have received, to the full extent, the attention which it deserves.

That the physician should at least avoid doing harm to his patient by the medicines which he administers, is a long-recognized maxim; but its application has probably been too generally confined to the idea that the remedy prescribed should, even if it do no good, at least not injuriously affect the patient. Another direction in which the maxim may be applied is, however, pointed out by DR. BROADBENT. A remedy, the action of which is at first undoubtedly beneficial, by relieving symptoms and mitigating disease, may, if its use be persisted in too long, and without proper guidance, or if its work be not assisted or regulated by the administration of other remedies, give rise to a morbid condition, and thus virtually undo the good which may have attended its moderate use.

As DR. BROADBENT points out, instances of the evil results of misuse of things, in themselves good if judiciously and moderately used, are ready at hand. We do not require to be reminded of the injurious effects of abuse of alcohol; and the miserable conditions of the opium-eater, or of the devotee to hypodermic morphine, or to chloral, are well known to medical men at least. The injurious remote effects in these cases are generally recognized to be due to the unauthorized abuse by patients of certain agents which affect the nervous system; but DR. BROADBENT believes, further, that many injurious effects, resulting from the injudicious use of remedies of other classes, are also traceable to the patients taking on themselves to continue the treatment which has been prescribed for them, and from which they have found relief.

In illustration of his remarks, DR. BROADBENT adduced the evil affects attending the habitual use of colchicum or of "specifics" by the gouty, or the misapplication of the "Banting" process by the obese, or the immoderate use of "Himrod" by the asthmatic; as well as the treatment, without regard to remote effects, of sick-headache and so-called indigestion. Other examples besides those noticed in detail —such as the injudicious use of purgatives— were necessarily passed over, but will readily suggest themselves.

It was not within the sphere of duty assigned to DR. BROADBENT to go beyond the strictly practical aspect of the subject, or to discuss its moral or social relations. But, from the valuable observations which he made in his address, the question naturally arises, How can such injurious results of self-quackery be obviated? Herein lies the difficulty. The physician may give wise counsel to his patient, not to abuse the good thing which has for the time being given relief; the advice may be followed —or quite as often it may not. And if the patient choose, even to his own detriment, to persist in a course against which he has been warned, what means of prevention are there? This part of the subject is one which we cannot discuss in the present place; but we cordially thank DR. BROADBENT for his suggestive address, and recommend our readers to pursue it and mark it well.—*Brit. Med. Journal*

TREATMENT OF EPILEPSY.—WILDERMUTH, in the course of a long career at the head of an institution devoted to epileptics, has had occasion to make trial of all remedies of reputed value in epilepsy, and has finally concluded that the treatment by bromides is indicated in the majority of cases.

In combating epilepsy, or, more properly speaking, the epileptic state, WILDERMUTH exhibits the bromide of potassium in the initial dose of thirty grains in children, and seventy-five grains in adults. The dose is gradually augmented to one hundred and twenty grains, and, very rarely, to one hundred and fifty grains.

The bromide is given in water or milk, and its exhibition is followed by physical exercise in order to decrease the likelihood of resultant gastralgia.

Iodides and chlorides are badly borne.

When medication is suspended, it is advised that the doses be gradually and slowly decreased.

The treatment may produce disagreeable consequences, which should be met more than half way. The dental and gingival alterations are prevented by gargles of potassium permanganate, and cutaneous eruptions by the daily administration of FOWLER'S solution, lukewarm baths, and inunctions of HEBRA'S ointment. With this ointment, also, the eruptions of bromism are treated when they appear, and when they are very rebellious he does not hesitate to use the sharp curette.

The circulatory troubles incident to the bromine treatment necessitate cessation of the medicament, administration of coffee, shower-baths to the spine, and massage of the limbs.

When patients are very susceptible to the pure bromide of potassium, the daily ingestion of a wine-bottle or less of ERLENMARER'S "bromized water" is to be preferred. The formula of this is as follows:

℞ Potassium bromide,
Sodium bromide, ää gr. lx.
Ammonium bromide, gr. xxx.
Liquor ammonia, gtt. j.
Carbonated water, f ℥ xx.

In recent cases and in adolescents WILDERMUTH employs a somewhat smaller dose of the bromides, and adds one-tenth to one-thirty-third of a grain of atropine sulphate. In desperate cases he has used the osmath of potassium, in doses of from one-seventieth of a grain to one-fourth of a grain, together with zinc oxide, according to the method of HERP.

He has seen no benefit from the use of curare or absinthe. The continuous current is chiefly of advantage in combating choreiform manifestations; the anode applied to the sternum, and the cathode to the spine. In subduing the psychical excitement, hydrotherapeutic methods have proven most useful; especially the moist pack and massage, gave favorable results in cases in which somnolence was very pronounced.

The dietetic regimen consists in the moderate use of meats, avoidance of spices, sobriety, and abstinence from tea and coffee.

The treatment of the access appears useless when the crises succeed each other rapidly. If they are more rare, he tries the wet pack, ice to the head, and a double or triple dose of bromide. Chloroform is discarded as unsafe, and chloral is reserved to combat the excitement in the intervals of the access. In cases

where arrest of the heart is threatened, he commends the subcutaneous injection, in the thoracic region, of camphorated oil, up to the maximum dose of two fluidounces.—*Gazette Hebdomadaire de Médicine et de Chirurgie.*

Massage in Fœcal Accumulation.—F. Treves in an article reproduced in Braithwaite's Retrospect, July, 1886. thus alludes to the value of massage in fœcal accumulation: Lastly, in the matter of local treatment, must be mentioned massage, and of its value in the present class of cases it is difficult to speak too highly. The best method appears to be that advised by Kriviakin. The patient lies upon his back; the hands of the operator are oiled, and, with the fingers widely opened, both palms are laid upon the abdomen; the hands are made to pass systematically in various directions; the pressure exercised is steady and deep, and the movements are slow; the manipulation on each occasion should extend over fifteen or twenty minutes, and should be repeated at such intervals as may be considered advisable. The results that have been obtained by Kriviakin, and by many others whose experiences are on record, afford most substantial support in favor of this mode of treatment. It is adapted only for that form of chronic obstruction that depends upon fæcal accumulation. In certain of the recorded cases acute symptoms had set in and the vomiting had become fæculent, and it is in these aspects of the malady that the good effects of massage have been the most striking. I have myself made use of this measure in several cases of fæcal accumulation, and have so far met with no results that oppose the conclusions of Kriniakin and others. There is no mystery about the measure. Zabludowski, by a series of experiments, has placed massage upon a scientific basis. He has shown that it restores exhausted muscle in a remarkable manner, that it increases the blood-pressure in the part and raises the local temperature. As Dr. Weir Mitchell well expressed it, massage is a most potent mechanical agent, influencing the conformation of the stercoral mass and modifying its position. It would appear also to act as a direct stimulant to the intestine, for within a few minutes of the commencement of the manipulation peristaltic movements are excited, which may in time reach such a grade as to cause much colicky pain. It is possible that such effect may be brought about by the immediate stimulation of Auerbach's plexus, under the control of which the peristaltic rhythm is supposed to lie. The stimulation also of the skin of the abdominal parietes may be not without influence. It is supplied by branches from the last seven of the dorsal nerves, and it is significant that it is from these very nerves that the splanchnics are in greater part derived. The part played by the splanchnics in the abdominal nervous system need not be commented upon Their precise influence upon the bowel has yet to be established, but, so far as movement is concerned, they appear to contain both excitory and inhibitory fibres. These explanations of the effects of massage are not entirely satisfactory, nor are they such as would satisfy the captious doubter. The doubter, however, can wait, and in the meantime the practical man may be satisfied that he has in massage a therapeutic measure of considerable value.—Mr. F. Trenes, *Ibid.*

Sublimate injections in Gonorrhœal Cystitis.—The history of an obstinate case of gleet and cystitis is given in El Dictamen, by Señor Gacia Andradas, which, after being treated unsuccessfully by means of injections of nitrate of silver, yielded very quickly to injections of corrosive sublimate. The patient, who was a river fisherman, contracted gonorrhœa, which was treated for a month with balsams and astringent injections. The discharge then became serous, and exquisitely painful vesical tenesmus supervened, the calls to urinate being so frequent as to give the man no rest. An attempt to pass an instrument occasioned the greatest agony when it came in contact with the prostatic portion of the urethra. The diagnosis made was that of acute prostato-cystitis consequent on gonorrhœa, and so the local application of a sublimate solution appeared to be the most rational treatment, as it had in the author's hands proved very beneficial in cases of subacute cystitis due to the same cause; but it was thought well to try first Guyon's treatment. With great difficulty, owing to the extreme sensitiveness of the urethra, an elastic catheter was passed to the prostatic portion, and ten grammes of a one-per-cent. solution of nitrate of silver injected. A few minutes afterwards urine was passed with great pain, so a warm bath and an opiate were ordered, which gave only temporary relief, the opium having to be repeated at night. The next day the patient's condition was the same as it had been before the injection. Three or four days afterwards a similar injection was given, with no better result. Four days later, as there was no improvement, the use of sublimate injections was commenced. The catheter was passed as far as the prostate, and forty-five grammes of a two-per-mille solution of sublimate in warm water were injected. This the patient was compelled to retain for three minutes; the subsequent micturition was very painful, but at night he was able to rest, and retained his urine for three hours. The next day the urine was less turbid, and it was voided less frequently. His condition continued to improve for three days, when a second sublimate injection was given of double the quantity of solution. This occasioned some pain, but it quickly passed off, and the patient was able to rest. In four days' time he requested to be discharged, as his urine was clear, and he had no pain on micturition. Thus, the author remarks, two injections sufficed to cure completely an affection usually most obnoxious to treatment of an ordinary kind. The superiority of sublimate injections has shown itself in several cases of a somewhat analogous character in which he has employed it. These he proposes to publish and discuss on some future occasion.—*London Lancet.*

An Aid to Success in Medical Practice.—A recent treatise, which we believe has been widely read by the medical profession, discusses very ably the requirements that physicians should add to the strictly scientific.

That there are many qualities essential to

the attainment of success in the practice of medicine, besides a knowledge of the science and art, cannot be denied, and the possession of these superlative pre-requisites are often seen to more quickly open the portals to remunerative practice than the most profound attainments.

Since the practice of medicine has, with few exceptions, become a business—a means of making money—physicians cannot afford to ignore the cultivation in themselves of those qualities which command, though they may not deserve, success. The æsthetics of one's profession must not, therefore, be forgotten. The dress, the air, the manner of the physician, all create an impression for good or ill, and for the mental influence exerted on fastidious patients, alone, it behooves the doctor to avail himself of every aid that pharmacy may extend toward robbing many of his disagreeable duties of their (to the sensitive patient,) obtrusively objectionable features.

A preparation which has been of great service to the doctor in this connection, is Antiseptic Cologne, manufactured by PARKE, DAVIS & Co., which combines the properties of an active disinfectant with those of an agreeable perfume. The active constituents of this preparation are thymol, oil of eucalyptus and mercuric chloride, combined with a cologne of superior quality. The utility of this preparation is at once apparent. Nearly all the disinfectants in common use, which have any real value, are limited in their uses about the house, and especially in the sick room, by their disagreeable odor. In the sick room this preparation may be employed in the form of a spray, with an ordinary perfume atomizer to overcome the disagreeable odors. Of course this must be merely as palliative; the air must be kept pure besides, by free ventilation. Surgeons and physicians will find it to meet several important indications when they are attending patients suffering from infectious diseases. It is useful as a disinfectant for the hands in cases of infectious diseases, or to remove the odor of Labarraque's solution, which is so often employed for the same purpose. In gynæcological and obstetrical practice, such a preparation as this is of especial service. A recent article in a medical journal (Progress, July, 1886,) highly commends the general use of Antiseptic Cologne by physicians, and we have pleasure in calling attention to its utility.—*Eastern Medical Journal*, Aug., 1886.

THE PHYSIOLOGICAL ACTION OF MENTHOL.—DR. GOLDSCHEIDER, at a meeting on April 6th, of the Physiological Society of Berlin, discussed the action of menthol on the sensory nerves. It was well known that it produced on the skin a sensation of cold, which was commonly ascribed to evaporation. On the other hand, the same sensation, when produced in the mouth by solutions containing menthol or peppermint, was explained by a supposed astringent effect. DR. GOLDSCHEIDER had come to the conclusion that neither of these explanations was correct. He made his experiments with a solution of menthol in lanolin which he rubbed into circumscribed regions of the skin. After the rubbing, the thermometer showed, in all such places, an increase of temperature to the extent of 2° Cent., notwithstanding the marked sense of cold produced. The hypothesis of evaporation was excluded by the fact that the feeling of cold was no less marked when the part rubbed was covered with a watch-glass, and could, therefore, be produced only by direct stimulation of the nerves of sensation of cold. Again, if of two corresponding places on the forehead, where these nerves are most adundant, one were rubbed with the menthol ointment, and the other not, bodies which previously had caused no particular sensation would be felt as cold on the former spot, but not on the latter. DR. GOLDSCHEIDER, observing that while some regions, as the forehead, were especially sensitive to cold, others, as the elbow and the volar side of the wrist, were so to heat, found that the inunction of these with menthol produced a sensation of warmth, though less striking than that of cold in the former regions; and he called attention to the recent communication of PROF. HERZEN, on the precisely analogous results of pressure on the nerve-trunks in these regions respectively. He therefore concluded that the sensations, in some places of cold, and in other places of heat, produced by menthol, were purely subjective and consequent on the direct stimulation of the special nerves of temperature, those usually cognisant of cold being far more sensitive to its influence than were those adapted to receive impressions of higher temperature.—*Brit. Med. Journal.*

SALICYLIC ACID AND COCAINE THE LATEST SPECIFIC FOR EPITHELIOMA.—DR. D. TOD GILLIAM, of Columbus, O., writes the N. Y. Record: "I desire to call attention to the use of salicylic acid and cocaine as a curative for epithelioma. It so happened, not long since, that I had a small epithelial growth to remove from the face, and resorted to a 20-grain solution of cocaine as a local anæsthetic. After the lapse of some minutes I was surprised to find the diseased parts not only exsanguined, as is usually the case after the use of cocaine, but extremely friable and crumbly. I saturated a good-sized pledget of absorbent cotton with cocaine and reapplied it, leaving it on for about thirty minutes. At the expiration of that time the diseased mass fell away with the slightest touch of the curette, leaving a healthy-looking surface which has healed kindly. This, I dare say, was not an epithelioma in the sense of being malignant, but was undoubtedly epithelial in character, and has suggested to me the feasibility of using cocaine in the former class of cases. I was the more surprised at the change produced, inasmuch as the usual effect of cocaine is to produce a condensation of tissues, and the bloodless condition may, for aught I know, depend largely on this condensation. But the fact remains, and we cannot gainsay facts. I would suggest, as a preliminary to the use of cocaine, that the horny layer of epithelium on the surface be softened by the application of salicylic acid, as we all know from experience that cocaine will not penetrate keratinic substance. In the absence of any case to demonstrate this treatment on, and as, unlike BILL NYE with the comet, I have not almost discovered one, I put this forward, hoping that some one will give it a trial. I am not unmindful that DR. SHRADY and his *confrères*

used cocaine in the case of GENERAL GRANT, or that the drug has now for a long time been in daily use for similar cases, but possibly not of the strength, quantity, and for length of time here indicated."

THE TREATMENT OF RABIES WITH HOANG-NAN.—According to the Gazette Médicale de Nantes, twenty-four cases of rabies have been treated with hoang-nan by DR. BARTHELMY and several other medical men of that city, or of the department. The first case so treated was in the month of March, 1882, the last in April, 1885. Ten times, at least, the bites, which were most frequently multiple, were situated on the hands, once on the hands and on the face. In the majority of cases cauterization was completely omitted, or practiced several hours or even several days after, with not very active agents, such as liquid ammonia, or a solution of carbolic acid. Two of the patients, who were closely observed by DR. BARTHELMY —viz., a man of thirty, and a lad of sixteen—presented symptoms of rabic mania: persistent insomnia, anxiety, nocturnal agitation, the desire to run, hallucinations, barking, etc. However none of these persons felt hydrophobia, nor have any of them, to this date, succumbed. The duration of this preventive treatment was, on an average, twelve days. The total dose of the powder of hoang-nan ingested during this time, varied in adults from six to eight grammes. It was scarcely necessary to go beyond one gramme per day to obtain the physiological effects of the medicine—exaggeration of the reflexes, rigidity, slight trismus. The maximum dose was arrived at progressively, and in some cases the treatment was terminated by gradually decreasing the doses. From the above cases the author deduces either that rabies is communicated much more rarely to the human species than is generally admitted, or that the hoang-nan, administered progressively to the physiological effects *during the period of incubation*, sufficiently and efficaciously modifies the nervous system and the entire economy to prevent the evolution of the rabic virus.

FREIRE'S PROPHYLACTIC INOCULATIONS FOR YELLOW FEVER.—M. REBOURGEON communicated to the Société de Biologie the results of his observations and experience with regard to the preventive inoculations against yellow fever practiced with DR. DOMINGOS FREIRE at Rio Janeiro, and according to his method. The months of December, 1885, and January of this year, were extremely hot in Brazil, and the yellow fever had raged with unprecedented intensity. Of three thousand and fifty-one vaccinated subjects in the city of Rio not one died, while in the same quarters and in the same houses two hundred and seventy-eight non-vaccinated persons perished. He claimed that the number of vaccinations had reached six thousand, and not one inoculated person had succumbed to the scourge. Moreover, in seven cases in which inoculations were made at the second period of the affection cure was complete. The number of strangers who submitted to the treatment were relatively small. Native Brazilians and mulattoes were the principal sufferers, while full-blooded negroes, though less severely than the others, were not rarely attacked. In reply to a question, he stated that foyers of infection were observed at an elevation of more than 700 metres.

In the discussion following this paper, M. MAUREL made the important observation that diet might be a predisposing cause of yellow low fever. The negroes at Gaudeloupe who are engaged in the hospital and adhere to the Creole régime (almost exclusively vegetable) were not attacked, while their comrades outside, who lived upon the same diet as their masters, were frequently seized. Evidently the animal regimen favors the development of the disease. This opinion was held by some of the old writers, and, as experience has shown, with good reason.—*Le Progrès Médical*, No. 22.

HYDRASTIS CANADENSIS IN UTERINE HÆMORRHAGE.—DR. NIKOLAI A. JIVOPISTZEFF, house-physician in the gynæcological wards of the Emperor Paul's Hospital in Moscow, states his experience of the therapeutic effects of fluid extract of hydrastis canadensis, which he has administered in over twenty cases of uterine hæmorrhage of various descriptions (menorrhagia, flooding from uterine atony, fibroids, cervical cancer, etc.), that "the best results from hydrastis were obtained in cases of chronic and sub-acute hæmorrhage depending on an inflammatory condition of the uterine tissues and surrounding pelvic organs," as well as on displacements of the womb. "In other words, successful results from the use of hydrastis may be expected only in cases where the uterus is firm, enlarged, tender; where its mucous membrane is inflamed, softened, or even ulcerated; or where there is some exudation around the womb. In all other cases, success is more or less doubtful. Thus, in cases of uterine fibroids and cervical cancer, the hydrastis treatment utterly failed to control bleeding. DR. JIVOPISTZEFF confirms the statement that hydrastis produces a favorable influence on dyspepsia, which often accompanies diseases of the female sexual sphere. Under the treatment, digestion improves, gastric pain and tenderness disappear." The medicine was given in twenty minim doses four times a day.—*Meditz Obezrenie.*

COCAINE AIDED BY ELECTRICITY TO ACT AS A LOCAL ANÆSTHETIC.—It is well known that the simple application of a cocaine solution upon the sound skin has no anæsthetic effect. This may, however, be brought about, according to DR. WAGNER, of Vienna, by combining an electric current with the cocaine. It is known that the electric current has the property of causing the forward movement of fluids which are contained in capillary tubes—this is called the cataphoric force or effect of the electric current. If the electrodes of a battery are moistened with a solution of cocaine, it has been found that the latter is propelled into the cellular tissue, causing the skin to become anæsthetic within a few minutes, so that it may be punctured with needles or cut with knives without causing any sensation or feel- of pain. Any desired amount of skin surface may in this manner be made anæsthetic. The

anæsthesia lasts 10 to 15 minutes, but may be prolonged by applying an Esmarch bandage previous to the application of cocaine.—*Pharm, Post.*

THERAPEUTICS OF DELIRIUM TREMENS.—PROF. LEUDET, of Rouen, in a valuable article in La Normandie Médicale, gives a resumé of twenty-two years' hospital practice in the treatment of delirium tremens. He says that long ago he gave up the indiscriminate use of opium and its alkaloids, as doing more harm than good. The mortality, which while using opium was 16 per cent. of all cases received, fell to six per cent. after the abandonment of the routine opium treatment. In the commencement of an attack he now makes use of an infusion of quinquinia (from 60 to 90 grains to the pint). This is given freely, is well borne and seems to cut short an attack. Bromide of potassium and chloral hydrate are both valuable drugs, rendering real service in quieting nervous symptoms and producing sleep. The professor concludes with GAIRDNER, that where opium is used to the extent recommended by some practitioners the patients as frequently succumb to the toxic effects of the remedy as they do to the delirium itself.—*St. Louis Medical and Surgical Journal*, Aug., 1886.

MORRHUOL.—The following is the method proposed by CHAPOTEAUT for extracting the active portion of cod-liver oil. The oil is first treated with a soda solution at a low temperature, in order to remove the free acids, and is then shaken up with ninety-per-cent. alcohol. It is then distilled, and the product is the active portion of the oil. Brown oil gives from 4.5 to 6 per cent., yellow from 2.5 to three per cent., and white from 1.5 to 2 per cent. of morrhuol. This is a nearly odorless fat, partially crystallized at ordinary temperatures, of a sharp, bitter, and aromatic taste. It is given in capsules of three minims each, corresponding to one and a quarter drachm of cod-liver oil. Children from six to eight years of age receive two, those from eight to twelve years, four, and adults, eight to ten capsules daily. DAFAGE states that it may be given for a long time without exciting any digestive disturbances, and he recommends it in tuberculosis, chronic bronchitis, scrofula, and rachitis.—*Allgemeine Medicinische Central-Zeitung.*

RHODAN SODA.—This powerful drug has been recently studied by PASCHKIS, the results of whose observations appear in SCHMIDT'S Jahrbücher, April, 1886. Its action is somewhat similar to that of strychnine, although less rapid. Five c. c. of a twenty-per-cent. solution injected under the skin of a frog caused prolonged tetanic convulsions, with inhibition of the respiratory and cardiac movements. Three drops of a three-per-cent. solution in contact with the exposed heart of the same animal produced a gradual slowing of the beat until the action ceased entirely, to be renewed on the application of a solution of atropine. When injected into the arteries of mammals, it caused a marked and permanent increase in the blood-pressure.—*New York Medical Journal.*

ACORIN A NEW GLUCOSIDE.—A new glucoside has been detected by HERR THOMS, in the rhizome of *Acorus Calamus*, to which the name of acorin is given. It is present in extremely small quantity, being found to the extent only of 0.1854 per cent. In the air it readily oxidizes when treated with dilute acids or alkalies, and is converted into a neutral resin acoretin, identical with the resin occurring in the rhizome. This resin, when reduced by nascent hydrogen, gives the essential oil of the root and sugar as its final products. A small quantity of an alkaloid named calamine is obtained after the separation of the acorin. It is crystalline, strongly basic, insoluble in water and ether, but soluble in alcohol and ether, chloroform, and acetone.

PELLETERINE IN PARALYSIS OF MUSCLES OF EYE.—A curious and unlooked for result has lately been obtained from the administration of pelletierine. DR. GALEZOWSKI, having observed that the muscles of the eye were contracted when pelletierine, or a decoction of pomegranate, was given as a vermifuge, was led to try the action of the salt in paralysis of the muscles of the eye, supplied by the third and sixth pair of nerves. The results obtained were very satisfactory, paralysis of the branches of the nerves being either cured or much improved after three or six doses, even where under previous treatment by other means for several months no relief had been experienced. —*Provincial Med. Jour.*

NITRO-SALICYLATE OF BISMUTH—A NEW CARDIAC TONIC.—New cardiac tonics are now appearing with almost menstrual regularity; and it is to be hoped that a climacteric will soon be reached. One of the latest, if not finest, under the name of nitro-salicylate of bismuth, has received the favorable notice of PROF. WAGNER, who has used it in his clinical practice at Buda-Pesth. It has the advantage, we are told, of being rapid in its action, and never cumulative in its effect. Its only disadvantage is that its effects pass away rapidly when its use is discontinued, and that some patients manifest an idiosyncrasy with regard to it.—*N. Y. Record.*

LOBELIA INFLATA: NEW ALKALOID.—HERR V. ROSEN, of the University of Dorpat, finds two alkaloids in the lobelia inflata, one a liquid, lobeline, the other a crystalline solid. The latter was found to resemble apomorphia in its emetic character.—*Med. News*, Aug, 1886.

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Original Articles.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, Aug. 16, 1886.

E. J. DOERING, M. D., President, in the chair.

DR. F. E. WAXHAM presented a

MEMBRANOUS CAST OF THE TRACHEA AND LARYNX.

The specimen presented was removed from a child nine years old. This cast had remained in the larynx and trachea for several months. The patient was brought to me from Minnesota by DR. MCDAVITT, of Winona. The history is as follows: The child claims that in April she swallowed a hedge-thorn while away from home. She was at once taken with suffocation, and twenty-four hours afterwards was operated upon when at the point of death, by DR. MCDAVITT, who performed tracheotomy. The child was unable to breathe through the natural passages after the introduction of the tracheotomy tube, although many attempts were made to remove it. It seemed impossible for the child to get a breath through the natural passages when she was brought to me. Upon laryngoscopic examination the larynx seemed to be closed, but digital examination revealed a very small opening into the larynx. In this opening a small sound was passed and this was followed by one of the smallest size intubation tubes, this by a larger one, and finally the largest sized tube was introduced. It could not be passed on account of the tracheotomy tube, and violent vomiting ensuing the tube and this cast were ejected. After the rejection of this membrane a large-sized tube was introduced and pressed down into position, as the tracheotomy tube was removed, which gave the child perfect comfort. She remained comfortable after the introduction of the tube, took several glasses of milk during the afternoon, and in the evening was taken to the train and returned to Minnesota, the intubation tube remaining in the larynx to be removed by the doctor in the course of a few days.

DR. JOHN B. HAMILTON, of Washington, D. C., read a paper on

THE RADICAL CURE OF INGUINAL HERNIA,

in which he said that the ablest surgeons from the earliest times to our day have given much attention to this subject. DR. BAXTER'S tables show that out of 334,321 recruits and substitutes examined by the recruiting officers during the war of the rebellion, more than 17,000 were rejected on account of hernia. The London Truss Society, during the first twenty-eight years of its existence, issued over 83,000 trusses. Two factories in Philadelphia manufacture and sell from 216,000 to 250,000 per annum. CELSUS was the first surgeon to have definite ideas about the operation for the cure of hernia; he used cauterization and a bandage. Ligature of the sac has been practiced from an early day. MAUPAS performed gastrorraphy. LANFRANC, in 1269, favored castration, AMBROSE PARE was the first to absolutely abandon castration; he used astringents. FREYTAG was the first to practice dilatation of the rings in strangulated hernia. NICHOLOS LE QUIN, of Paris, introduced the truss about the year 1660, but it was not until the middle of the 18th century that surgeons began to cut off the gangrenous portion of intestine in cases of strangulated hernia. The galvano-cautery was proposed by DR. JOHN C. MINOR, of New York. GALAUD, in 1878, favored the elastic ligature. The practice of scarification is a very ancient one, and has been brought down to recent date with excellent results. GUERIN was probably the first to practice subcutaneons scarification. Investigation has for its object the occlusion of the inguinal ring by the fascia, and sometimes by the integuments. The late DR. GEORGE ALLEN, of Springfield, Ill., reported fifty cases cured by Gerdy's method. Wood's method not only invaginates the fascia, but draws together the pillars. All of these methods have their greatest successes in small hernias and bubonoceles, and are absolutely useless in those which are so large that ordinary invagination will not occlude the opening. DR. ALEXANDER stated, in 1883, that he had performed the radical cure thirty times without any deaths. WOOD reports 339 cases without special antiseptic precautions; 96 were cured, 7 died, and 59 failed; in the remainder the result could not be ascertained. Accidents may follow Wood's operation as well as others, such as sloughing, peritonitis, and tetanus. From official reports on file in the Marine Hospital Bureau at Washington, it appears that in Calcutta, India, in 1884, out of a total number of deaths from all causes, of 1293, nearly nine per cent. were due to tetanus. DR.

HAMILTON favored an operation in all cases affording a reasonable prospect of cure, and thought all cases of bubonocele should be operated upon.

DR. D. W. GRAHAM said: I think I express the sentiments of every member present when I say that it is probably not possible to find in the English language as complete and satisfactory a review of the history of the various operations for the radical cure of hernia as DR. HAMILTON has given us in this paper. Certainly it has been gratifying and instructive to us all to listen to it. Some of the figures which the doctor quotes gives us an idea of the great prevalence of hernia. I believe that reliable statistics show that on an average about every fifteenth or sixteenth individual in civilized communities suffer from some form of it. When we remember this great prevalence, and when we remember that every subject of a hernia sustains thereby a certain amount of disability, and that very many are entirely disabled by it, the subject of the radical cure of hernia assumes an importance not always accorded to it. I think the author of the paper takes rather a highly-colored view of the future of these operations. It is not probable that this generation, at least, will be able to use the expressions he thinks surgeons will be using some day in Chicago. However, this degree of success is to be looked forward to and admitted if possible. In regard to the modern methods of operating, I understand the distinctive features of Wood's method to be that it is almost entirely subcutaneous, that he uses wire, and that he allows the sac to remain in the canal as a kind of plug. So far as I know, this method is not practiced in this part of the country to any extent. In MR. WOOD'S hands it seems to be successful in permanently curing a considerable majority of those operated upon, and in decidedly benefiting a good many who are not permanently cured. His statistics show that there is almost no danger to life from the operation itself, at least in his hands. Any method which will give such results and at the same time involves so little risk to life, must be a good operation.

The open method, the one chiefly practiced in this country, according to my observation, contemplates strict attention to antiseptic details and the avoidance of suppuration. It involves a little more risk to life from the operation *per se*, but to compensate for this would seem to give, theoretically any way, a large percentage of permanent and complete cures. The modifications or varieties consist chiefly in dealing with the sac. Although MACCORMAC claims that unless the rings are wide there is no advantage in attempting to close them. It seems to me the best way to treat the sac is to excise the section of the neck between the ligatures, pushing the stump into the abdominal cavity and allowing the body of the sac to remain, unless it is small and loosely adherent, when it may be extirpated. After any of these operations there remains the funnel-like depression on the inner surface of the abdominal wall, which favors a recurrence of the hernia however efficiently we may have obliterated the sac and closed the rings.

MACEWEN, of Glasgow, in a recent article describes and advocates a plan he has devised for obliterating the depression. He utilizes the sac by dissecting it from its surrounding attachments, putting a suture through it from side to side, beginning at the lower end, thus making a corrugated pad, which he pushes through the internal ring into the cavity, after first separating the peritoneum for a little distance around the ring with the finger. This makes a convexity on the inner surface of the abdominal wall, when there would otherwise be a concavity. This modification appears to be a real improvement, but the practical value of it is as yet conjectural. By way of adding something from an historical standpoint, I might mention, what I think was not alluded to in the paper, that electrolysis has been used and advised to set up a plastic inflammation in the inguinal tract. I believe this suggestion comes from a Cleveland surgeon, whose name I have forgotten. This is the same in principle, of course, as the use of subcutaneous injections, and I should think would be preferable to the injections, if I were to judge of it without having tried it.

DR. MOSES GUNN said: This subject is of intense interest, and we are very much indebted to DR. HAMILTON for the exhaustive review he has given us. We have to consider what are the best methods for operating with the intent of effecting a radical cure. I am inclined to discard all the old invaginating processes. In the first place, the invaginated portions are always liable to subsequent prolapse; in the nextplace, it is always a foul mess. It won't do to simply remove the cuticle; all the organs of the skin must be destroyed. The skin contains the hair, sweat and sebaceous follicles, and unless they are destroyed, they will continue their work, and thus accumulate material for decomposition. In order to make a success, you are obliged to do more than destroy the cuticle. You will have to destroy the skin, and that is a very slow process and exceedingly nasty. Therefore I am inclined to repudiate all invaginating processes. I repudiate, also, all of the subcutaneous processes, for they are blind procedures, and I would not adopt them where an open operation could be as well, and even more advantageously resorted to. I believe the best and surest method of trying to effect a radical cure of hernia is the open method. This method should be performed in every case where an operation is made for the relief of a strangulated inguinal hernia. Just

as soon as the operator has opened the neck of the sac and restored the prolapsed viscera or viscus, he should close up the wound. He should begin at the topmost portion of the sac, and with a curved needle and catgut take it up and ligate it as near to the internal ring as he can. Then he should drop down about half an inch lower and ligate again, and so on down through the canal. He should then approximate the pillars at and above the external ring as closely as possible and close the outside tissues. Thus the operation which is made for the relief of the accident should be made an operation for radical cure. It can be done more effectually at that time than any other.

Then again, the physician is called upon to make an operation for a radical cure; the patient comes to him complaining of the truss, which has become ineffectual, the hernia escaping in spite of it, and his life becoming a misery to him, and he asks if something cannot be done to make a radical cure. The answer is, "yes;" but the question is, by what method shall we make it? I say by an open operation, practiced with all antiseptic precautions. Cut down upon the parts, separate and dissect out as well as you can the neck of the sac, the hernia having been reduced; ligate the sac and cut out a portion. Thrust the stump back into the canal and approximate the pillars, closing them tightly and keeping the external ring tightly closed. So much for the method; now for the prospect of success. How much right have we to expect what might justly be called a radical cure? By the the term radical, I mean permanent. In what proportion of cases can we expect to have a permanent cure, so that the patient will never have hernia again? What is hernia, and who have it? I think I can safely say that the typical man never has hernia. When the true type in development has been attained and the abdominal walls closely woven together, they are proof against such accidents, and there will be no hernia. Hernia is the result of the imperfect development of the abdominal muscles and aponeuroses. When that imperfect anatomical development obtains in the patient, the abdominal muscles are thin and flabby, and in such cases we get hernia. Nor can we in such a case by an operation make a man better than his Creator made him, but if we can make him as good as he was, we may congratulate ourselves. After we have operated and closed up this weak point as well as possible, the very best result that we can expect is that we have made the man as good as he was before he had hernia; but, if he was weak enough to have hernia from certain exciting causes, he will be weak enough to have it under similar circumstances again. If his rupture is brought on by lifting and straining, the same exciting cause will bring it on again, and under these circumstances a radical cure is only measurably radical. We should tell the patient after operation that if he will be more careful and take no violent exercise, he may hope for exemption from hernia.

In other cases, the patient has an old and immense hernia, and cannot wear a truss; we operate upon him and can say to him that if he will be more careful and wear a truss, he can be tolerably comfortable for the rest of his life. Such, I apprehend, is the true aim and scope of operations for the radical cure of hernia; such are the precautions we should give our patients, as they must become our coöperators in order to make this operation a success; and with such coöperation and conscientious efforts on our own part, radical cure of hernia becomes a standard and important operation, as important as the subject itself, which, as we have seen, is of immense importance on account of the great discrimination of the disease.

DR. E. F. WELLS said: DR. HAMILTON has certainly read a very interesting and extensive paper. There is one point in particular mentioned by the author, namely: that he advocates an operation in all suitable cases where an operation is not distinctly indicated. Every practitioner of large experience must certainly have met with many cases in which the truss has been applied resulting in a cure, and I think the truss should not be stricken entirely from the radical cure of hernia.

DR. HAMILTON, in closing the discussion, said: I need not say that I am extremely gratified to find such substantial unanimity of sentiment as to the propriety of operation—nay, as to the necessity of operation, but there can be no doubt as to the necessity of further statistics on the subject. In regard to invagination, I think a reading of the paper will not show that I advocated the method of invagination recommended by GERDY. In the recent open method there is no invagination. Under the original Wood's method, the subcutaneous fascia only was pushed up under the ring; by the open method we cut down directly on the sac. This open method is really a combination method, because it brings together the pillars and takes care of the sac. Statistics are necessarily unreliable as to the ultimate permanency of the cure of these cases. The best statistics are those shown by the Swedish Hospital, where out of 300 cases a large percentage of recoveries is shown, and if statistics are worth anything in determining the success of a method, we must place some reliance on these. It would be well to have patients come back every year for the purpose of re-examination.

DR. FENGER, if I correctly understand him, speaks of the influence of suppuration in curing these wounds by letting them heal from the bottom, but in the various subcutaneous

operations that is exactly what it is intended to avoid. There is no doubt that suppuration will make a radical cure of hernia if the patient's strength lasts, and the suppuration does not extend into the abdominal fascia. That was the method by which the old red-hot irons accomplished their purpose. The mineral acids produce a radical cure by the destruction of the tissue and healing from the bottom. The seton also performed a cure, but it has so many disadvantages that it is not to be compared with those procedures that stop the inflammatory processes short of the decomposition or death of the exudate. In regard to operating on children, I think the argument cannot be regarded as sound that we should not operate on them on account of the difficulty of keeping a bandage on, for surely if any cases are to be benefited by an operation for radical cure, they are those in which the patient is young enough to grow—in which the tissues can be brought together and retained with great hope of a permanent cure. Everybody knows that cases do recover by the use of the truss, but the proportion, I believe, is less than by any other method. As stated by PROF. GUNN, it is found that a majority of operations for strangulated hernia are, in effect, really operations for radical cure, and there are more than five cures from operations to one after application of the truss. And when we remember that there are 250,000 trusses manufactured per annum in Philadelphia alone, I doubt very much if it can be shown that trusses have even a fair percentage of recoveries following their use.

DR. WM. T. BELFIELD reported a case of

SUPRA-PUBIC CYSTOTOMY WITH EXTRACTION OF LARGE CALCULI, AND CORROSIVE SUBLIMATE POISONING.

The patient was a feeble, emaciated man, 71 years old, who for nine years had suffered from cystitis of steadily increasing severity, caused, as was supposed by his various physicians, by prostatic enlargement. He had been sounded for stone a year ago under chloroform, but with negative result. For two years he had been unable to empty the bladder except by catheter. He refused permission to introduce the sound because convinced that he had no stone, but was anxious to have an operation for the removal of the prostatic enlargement.

June 7, supra-pubic cystotomy was undertaken for the purpose of removing by galvanocautery that portion of the prostate which was assumed to project into the bladder. The introduction of the sound under ether revealed a large stone; the usual incision was made; the finger in the bladder found two calculi, one behind the prostate, the other adhering to the fundus of the bladder, each about as large as a walnut. The first stone was crushed and the second with much difficulty removed entire. The patient was so collapsed that no attempt was made to remove the prostatic outgrowth, which could have been accomplished without much difficulty, and the following day the temperature was 100.5°, the highest observed. On the third day it was normal and so remained. The wound was irrigated once daily with a bichloride of mercury solution. The progress was entirely favorable until the eleventh day, when there began a severe diarrhœa with much rectal pain and tenesmus, and later the evacuations were tinged with blood and the patient complained of a metallic taste. Sublimate poisoning was recognized and the solution discontinued. Temporary improvement followed, but death ultimately resulted on the thirty-sixth day after operation. No autopsy was permitted, but a hasty examination of the abdominal contents was made. Peritoneum, kidneys and bladder were normal, except that the latter was much hypertrophied. The intestines could not be opened; the calculi weighed 2 ounces and 6 drachms.

THE DEATH OF DR. F. H. HAMILTON.

DR. TRUMAN W. MILLER offered the following resolution, which was adopted:

WHEREAS, This Society has learned with deep regret of the death of DR. FRANK HASTINGS HAMILTON, of New York, and

WHEREAS, In his death the United States has lost one of its most distinguished surgeons; one of its ablest teachers; one of the purest patriots, and, in his private life, one of the most amiable of men, therefore be it

Resolved by this Society, that we hereby give public testimonial to the many virtues of the deceased, and that we tender his family the assurance of the profound sympathy of this Society with them in the hour of their affliction. And that a copy of these resolutions be furnished them, and a copy spread upon the records.

NOTES ON THE LOCAL USES OF NORMAL LIQUID ERGOT.*

SCLEROTITIS.

Reported by P. L. Hurt, M. D., Booneville, Mo.

During the latter part of 1884 a lady suffering from sclerotitis, who had been treated for a year by one of my respected colleagues, came to me for treatment. Presuming that my professional brother had resorted to the usual remedies, I decided I should depart from the customary methods of treatment. In casting

* These reports, presented to the editor from time to time in fragmentary form, it has been thought desirable to publish together, to more perfectly illustrate the range of local application of this now important topical agent.

about for an "idea" I fortunately thought of ergot. Having a bottle of Parke, Davis & Co.'s Normal Liquid Ergot in my office, I determined to give it a trial as a mere venture. I was the more ready to use this preparation because by dilution it makes an excellent solution for hypodermic medication. I used one part to four or five of distilled water and made the application as I would with any collyrium. To my agreeable surprise and the extreme satisfaction of the patient, the eye was restored to its former healthy condition within two or three weeks.

ACUTE GONORRHŒA.

Reported by W. M. Casey, M. D., Seymour, Ind.

About November 10, 1885, a mechanic, aged 26 years, came to me with acute gonorrhœa. I prescribed at intervals different remedies for injection common to the ordinary treatments, but they did not have much control over the discharge.

At the end of four weeks I became worried, the patient being of good family and "good pay." It occurred to me that normal liquid ergot might serve a good purpose, and I prescribed as an injection normal liquid ergot (P., D. & Co.'s), one part; water, six parts.

This was on December 12, 1885. On December 22d, he returned representing marked improvement. The discharge had almost ceased. At this time I repeated the formula. This sufficed to complete the cure, for January 5th he called to pay his bill, stating that he was well. In all he had used only f ʒ iij of the normal ergot, diluted as stated.

ACUTE OPHTHALMIA.

Reported by R. R. Mitchell, M. D.,* Mansfield, Ohio.

May, 1885, MISS C. W.; American; age 23; chambermaid; acute ophthalmia. The inflammation had existed about 36 hours. Pain in the eye-ball was severe. The photophobia was distressing. The ocular and palpebral conjunctivæ were much congested. Chemosis was threatened. The lids were greatly swollen. There was considerable blurring of vision In fact, it was evident that with any ordinary treatment the case would prove troublesome, and would be likely to persist for a week or two at least. Remembering the physiological action of ergot, and recalling that PROF. ROBERTS BARTHOLOW, speaking of *ergotin* as being "useful in phlyctenular inflammation of the eyes of children," I resolved to test the normal liquid ergot (P., D. & Co.'s) in this case. I chose this preparation because of its non-irritating character and its uniformity of strength. The formula employed was as follows:

℞ Liquid ergot, normal, f ʒ ij.
Aq. dest., f ʒ vj.
M. Sig. Evert the lid and apply with camel's-hair brush, or by instillation from a minim dropper every four hours.

A mixture of similar strength was used as a lotion during the intervals. The only other treatment was the administration at once of a Seidlitz powder and two c. c. improved pills. The applications were continued during the waking hours for two days. At the end of that time no further treatment was necessary, as the eye was perfectly clear and free from congestion. In the course of an hour or two after each application it could be seen that the hyperæmia was diminished.

CHRONIC GONORRHŒA, CHRONIC BRONCHITIS AND SYPHILITIC ULCERATIONS.

Reported by N. V. Speece, M. D.,* Quincy, Ohio.

I believe I am the pioneer in the use of ergot in old gonorrhœa, in long-continued cases of gleet, and in certain forms of chronic bronchitis. I have been employing ergot in these affections for a period of six or seven years. Formerly I used DR. SQUIBB'S preparation, but latterly I use PARKE, DAVIS & CO.'S normal liquid ergot.

The origin of my discovery, as it might properly be called, perhaps, was my utter failure in treating an old case of gonorrhœa that had persisted for three years. Other physicians had withdrawn from the case in despair. While reading the literature of normal liquid ergot, I began to think it might meet the therapeutic indications in this obstinate case. I immediately acted on the thought. I cleansed the parts well, and bathed the urethra thoroughly clear back to the neck of the bladder by injections of the preparation referred to, using one part to four of distilled water. I was rewarded by obtaining a cure in a few weeks; and this brought me a number of other cases. I met my next case shortly after, which had a history of 18 months' duration; another of 9 months; others of 13, 17, 19, 6, 3, and 4 months, respectively. And these were cases that had defied every effort of some of the best of my *confrérés*. I have yet to meet my first case of failure with this treatment, and now record my 49th case of gonorrhœa and 19th case of gleet.

As a local application in cases of chronic bronchitis, my experience with ergot has not been so prolonged, and the proportion of cures has not been so large. I have treated fourteen cases in two years, by inhalation; spraying the parts with a mixture of normal liquid ergot (1 to 4) three or four times per day. Success has followed in eleven cases, and failure in three. I believe the failure in these was due to the want of persistence on the part of the patients. Of course I think some associate treatment is necessary in all

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* Member of the American Medical Association, of the Ohio State Medical Society, etc.

these cases; but that must be left to the individual judgment of the physician. And yet I must say that in four or five cases of bronchitis, cures were effected with the ergot alone. At least I think so. The patients recovered, and no other treatment was employed.

As regards its use in syphilitic ulceration in the buccal cavities, the throat, mouth, etc., will state that I apply to the ulcerated patches with a brush, the normal liquid ergot, full strength, fairly saturating the parts three or four times a day. A marked success has followed in a majority of cases. Mercurials were administered in connection with the local treatment; also iodide of potassium. It was gratifying to hear the patient express satisfaction at the disappearance of the ulcers. I have used it alone in one or two cases, and the sloughs rapidly disappeared, but would eventually return. I should state that I do not place much value in the ergot without the constitutional treatment as a basis; still, I am treating a young man with a throat full of sloughs and numerous patches in the mouth. In this case I am administering one-half drachm doses of the ergot three times a day, and I am touching the ulcers thoroughly with the full strength liquid. He is improving. I am thus testing its power unaided by other medication.

A new era is approaching in the treatment of diseases that affect mucous membranes, with ergot as a therapeutic agent. And I am persuaded that its use is indicated in diphtheria, scarlatina, and in any and all of the exanthemata; in some as purely local, in others as both a local and constitutional treatment. In materia medica there are a few leading therapeutic agents —in "grocery" parlance,—"stapler" and I fully believe that ergot will soon take a prominent place in the list.

CATARRHAL INFLAMMATION OF RESPIRATORY AND GENITO-URINAY TRACT.

Reported by G. T. McCoy,* M. D., Columbus, Ind.

It will afford me pleasure if, in the following rambling account of my experience with ergot, I shall be able to assist any brother physician who may be puzzled to decide what remedial measure will meet the therapeutic indications of his "case."

We do not yet appreciate the the full value of ergot as a medicinal agent. New truths, new facts regarding it, are being unfolded to me month after month, as I continue my study of its various applications. I believe it is destined to rank high in the estimation of the profession as a means of treating affections of the mucous membranes.

About four years ago I read a short note in some journal to the effect that "ergot is said to be good for gleet," but no mention was made as to how it should be used. I prescribed it internally in the form of the fluid extract, in tenminim doses, three times a day, in two cases of gleet. Cures resulted, or rather, the patient "got well," for I believe some of these cases are self-limiting, or would be if we did not interfere. Thinking thus, I paid no particular attention to the subject until a year ago. Having observed that *large* and *small* doses of ergot had opposite effects upon the gravid uterus, I began to reflect more closely upon the possibilities of its use in various affections. It then suggested itself as a local treatment. I at once put this proposition into execution.

A summary of the cases in which I regularly employ it, in some cases only locally, in others internally and by topical application combined, would cover nasal catarrh, chronic pharyngitis, tonsillitis, otitis, acute and chronic gonorrhœa, gleet, prostatitis, leucorrhœa, etc.

In nasal catarrh it alone does not meet the indications. I find it necessary to combine with it some local anæsthetic, as cocaine. If in dysentery we resort to measures to prevent straining at stool, we allay irritation at once. So it is in acute nasal catarrh. If we prevent sneezing, we remove one cause of irritation. This we may do by anæsthetizing the mucous membrane. If now we employ also a means that will promptly and effectually diminish the hyperæmia, we may reasonably expect a cure. This I have found ergot will do.

Tonsillitis.—My observation warrants me in saying that if ergot is used topically, by means of a brush (the fluid extract or the normal liquid ergot), in its full strength in the inception of the attack, the formation of abscess is prevented.

In chronic pharyngitis I believe it has no superior, as numerous cases I have treated successfully will attest. As in tonsillitis, my method of application is to touch the parts thoroughly with a brush, using the full strength. I have used PARKE, DAVIS & CO.'s normal liquid ergot, employing a strength of one to four in two cases of acute gonorrhœa, with success. This proportion (normal liquid ergot) is probably the most eligible, not being irritating, and making a clear mixture.

Prostatitis.—A little more than a year ago I treated an old gentleman of 60 years, successfully with this agent. He was a travelling man, and the inflamed prostate was causing him much distress, his occupation aggravating the existing trouble. At first I employed ergot and henbane by means of suppositories. In a day or two I withdrew the henbane, and continued the ergot. A year later he paid me. I took occasion to make an examination at this time, although he professed to be cured, and found only a slight enlargement of the prostate.

Otitis.—I am now treating a case of puru-

* Secretary Pension Board, Bartholomew Co., Ind.

lent inflammation of the middle ear. The tympanum is intact. I use boracic acid and ergot. The hearing is already improved, and the discharge greatly diminished.

Leucorrhœa.—I have reserved to the last what I believe to be the most important use of ergot, viz., in the treatment of leucorrhœa, particularly when due to cervicitis. I employ the fluid extract ergot and glycerin by means of a tampon of cotton saturated with this mixture. I also use the fluid extract in full strength by application with a brush. In these frequently intractable cases I have been surprised at the speedy improvement and cure resulting from this medication. Following the use of carbolic acid or chromic acid in the same class of cases, I find it valuable combined with glycerin; especially where the use of these remedies has been abused.

My professional duties prevent me taking the time necessary to tabulate my cases. I trust others more able will take up this work so that we may soon know the value of this *old* but *new* agent. It is evidently true that in some affections of the mucous membranes other remedies may answer the purpose better; but I insist that it will prove to be a valuable and indispensable aid to the physician in this field, when its virtues are once known.

It is of course not necessary to refer at length to the *modus operandi* of ergot in the cases cited by these gentlemen. It certainly does not act as an ordinary astringent. Does it not by inhibition reach the peripheral nerve filaments of that portion of the vaso-motor system supplying the circular muscular fibres of the arterioles, and by its stimulation of these fibres lessen the lumen of those vessels, by this means diminishing hyperæmia ?

INCIDENTS IN THE LIFE AND LABORS OF LOUIS PASTEUR.

BY DR. SAMUEL BELL, PORT HOPE, MICHIGAN.

The subject of the following remarks was born in Dôle, France, in 1822. Throughout the greater part of his life he has been laboring for the advancement of science. At an early age he manifested a desire for scientific pursuits. His genius in that direction soon gave him the title of an able experimentalist. At the early age of 32 years he was made Dean of the Faculty of Sciences, at Lillel, a town in which one of the principal industries is the manufacture of alcohol from beet root. His investigative genius drifted towards the subject of fermentation. In 1857 he first gave his authoritative views with reference to the germ theory of fermentation, and by crucial experiments and demonstrations proved beyond a doubt the correctness of his statements. His next experiments were made upon wine and beer. After a series of investigations, PASTEUR was led to recognize two distinct forms of microscopic life, one of which he termed the aerobies, which require air, and the other the anærobies, which live without air. Both classes of these organisms conspire to accomplish the great work of keeping up the balance of nature, by giving back to life the material that is essential to its own production.

During the dark days of the supremacy of the commune in France, PASTEUR was occupied in studying the little living ferment in beer and wine. Near the conclusion of the national war, he remarked that the "etiology of contagious disease was on the eve of having unexpected light shed upon it." In 1862 his attention was called to the deadly disease which was attacking sheep, cows, horses, and rabbits, and which was communicable to man; known generally under the name of splenic fever. After a careful study of the question, PASTEUR affirmed that the living bacilli or micro-organisms which had been before discovered by DAVANNE and RAYER were the real cause of these terrible diseases. All the foregoing investigations and experiments were but the initial steps to greater and grander achievements. His marvelous career from this date commands our admiration and attention. Whilst he was engaged in his investigations into the nature of splenic fever, his attention was called to a destructive fever among fowls, called "the fowl-cholera." PASTEUR soon discovered that a minute microbe was invariably present in the infected fowls, and that he could reproduce the disease at will by introducing these organisms into the blood of the healthy fowels. He also noticed that whenever a drop of liquid containing these microbes was mixed with the food which was given to the healthy fowls that the disease was communicated to them. Manifesting itself through the membranes of the intestinal canal. He next found that he could multiply the microbe itself by feeding it artificially in a decoction of fowl-flesh, and that the minutest part of a drop of this artificial cultivation introduced on a needle point into a healthy fowl produced the disease, and severe enough to produce death. His keen investigative discernment now manifested itself to a remarkable degree. It occurred to him, as they were aerobic organisms and subject to the influence of the air, might not the virulence of the contagion be modified by allowing a certain length of time to intervene between the attenuation of the microbe and the inoculation. The attenuation was made, each cultivation was put into a glass flask, plugged with cotton-wool sufficient to prevent the ingress of any floating germ which might be in the atmosphere, and at the same time allowing the entrance of pure filtered air. Another inoculation was made with the results just as

foreseen by the great scientist. The fowls that were inoculated by this kind of virus in a few days became ill and feverish, but no deaths resulted. Another very important fact was established; that after an inoculation of the most deadly virus into fowls previously inoculated by the modified form, not one death ensued, proving the self-protective nature of the disease.

After this important discovery he still farther prosecuted his studies and investigations with reference to splenic fever, called by the French, charbon, by the Russians, Siberian pest, and Germans, milzbrandt. It is a disease which chiefly attacks the lower animals, cows, horses, and sheep, and is very deadly and capable of being communicated to man. M. PASTEUR stated before the International Medical Congress, which convened in London, in 1881, that France lost animals from charbon annually to the amount of 20,000,000 francs. It was discovered that this disease was also of a non-recurrent type. Did an unfortunate victim ever recover from an attack, immunity from the fatal disease was for ever established.

PASTEUR discovered that the microbe which produced this disease differed from the others he had studied, in that an attenuated form could not be produced by long exposure to the air. On February 28, 1881, he made the memorable announcement to the Academy of Sciences that he had succeeded in securing a protective vaccine for this most terrible disorder.

It was at once proposed that he should demonstrate the efficacy of this vaccination by a public experiment. PASTEUR immediately aquiesced in the suggestion, and it was arranged that 50 sheep should be placed at his disposal, and that 25 of these should be subjected to two inoculations at intervals of from 12 to 15 days from two vaccines of unequal strength. Some days afterwards these twenty-five sheep, and at the same time the other twenty-five sheep which had not been vaccinated, should be simultaneously inoculated, with the virus of virulent splenic fever. Ten cows were also provided, and treated after the same manner. On June 2d more than two hundred people assembled to witness the result. Out of the twenty-five sheep that were not inoculated, twenty-two were dead, and the remaining three dying. The remaining twenty-five which were vaccinated, were well and in good condition. The non-vaccinated cows had large swellings, intense fever and anorexia: the vaccinated cows were all in good condition. The demand for splenic vaccine became so great that M. PASTEUR was obliged to establish a manufactory for splenic fever vaccine a short distance from his laboratory, and at the end of the year had vaccinated 39,346 animals. It was just previous to the above experiment that his daughter made the public statement that "her father would in the near future make some valuable developments in the scientific world." Whatever may be our opinion with reference to many of his previous experiments, the one narrated above has stood the closest criticism, and proved to a demonstration the value of his researches in connection with a very formidable disease. M. PASTEUR, in his London address in 1881, stated that the renowned LISTER, on reading his publication on milk fermentation, in 1857, first received the inspiration which enabled him to mature the most valuable contributions which surgery had received during the present century. DR. DAVARUE, who had also labored assiduously, and not without some success, in trying to find the cause of charbon, gave PASTEUR the credit of first inspiring him, or suggesting to him ideas which led to his labors in the above direction, from reading his work on butyric fermentation and the vibrio which is characteristic of it. An instance of the evolution of genius. In 1868 a sad event happened to him, which for a time threatened his life—an attack of paralysis on one side. In the conviction that he was about to die, he dictated to his wife a note respecting some conclusions which he had arrived at, to be formally communicated to the Academy of Sciences. He said feelingly: "I regret to die. I should like to render more service to my country." Happily for the country he did not die, but he never regained the use of that limb. The French government gives him a pension of 25,000 francs annually, in order to encourage scientific investigations, a precedent which other countries would do well to follow. While many of his deductions are open to candid criticism, yet he has established enough to disarm critics in several directions, and is at the present time gaining the confidence of many of our most conservative minds.

Correspondence.

A PECULIAR ABDOMINAL INJURY.

A peculiar case of injury to the abdomen came under my observation a short time ago, and believing it to be of sufficient interest and rarity, I report it;

GEORGE G., æt. 18, employed at the Michigan Curtain Roller Co.'s works, was standing by a saw table, when by some accident a heavy piece of timber was thrown back over the saw and struck him in the abdomen with considerable force. The man staggered and fell, apparently not badly hurt. At 3:00 p. m., an hour later, it was noticed that he was growing very faint and cold, and medical aid was immediately summoned. An inspection of the seat of injury (the left inguinal region) showed a large ecchymotic area and considerable swell-

ing. The patient was suffering severely from shock and his pulse was slow and very weak. Stimulants were employed perseveringly and he soon rallied. During the evening his pulse remained at 100, full and strong; nor was there any change till early the next morning, when he became quite restless and died very suddenly at 7:30 a. m.

At 11:00 a. m. an autopsy was held by DR. FEURBRINGER and the following facts disclosed: On opening the abdominal cavity a large amount of clotted blood was found, especially on the left side, where the injury was received. An examination of the contents of the abdomen revealed no lesion which could account for the profuse hæmorrhage, all the viscera being intact; but an inspection of the internal abdominal wall brought into view a rent extending through the peritoneum and muscles to the subcutaneous fat and connective tissue. The tear was directly beneath the seat of injury, about two inches in length, running upwards and inwards across the path of the deep epigastric artery. Round about this rent within a radius of two inches, the muscles were dissected from the adipose tissue by a large blood-clot, which, as also the clots in the abdomen, sprang from the rupture of the epigastric vessels.

From a record of the pulse we must conclude that the hæmorrhage ceased entirely a few hours after the reception of the injury, for the pulse became regular and strong. That the hæmorrhage should be stopped by clotting of the blood is, it seems to me, a rather remarkable and rare occurrence where such a large blood-vessel as the epigastric is involved. In this case the clotting undoubtedly stopped the hæmorrhage for some hours, until from some cause or other the hæmorrhage suddenly began again and death speedily followed.

G. C. SCHEMM.

SAGINAW, MICH.

REV. DR. BUCKLEY, editor of the Methodist Christian Advocate, has a long article in the June Century opposed to the claims of Christian "faith healers." "Its tendency is to produce an effeminate type of character which shrinks from any pain, and to concentrate itself upon self and its sensations. It sets up false grounds for determining whether a person is or is not in the favor of God. It opens the door to every superstition. It directs attention from the moral and spiritual transformation which Christianity professes to work, a transformation which, whenever made, manifests its divinity, so that none who behold it need any other proof that it is of God. It destroys the ascendency of reason in the soul, and thus, like similar delusions, it is self-perpetuating; and its natural, and in some minds its irresistible, tendency is to mental derangement."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

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Editorial.

BOOKS AND REVIEWS.

Some of our exchanges, as would appear from the tone of their remarks, have received notices from an eastern publishing house (WM. WOOD & CO.) that in the event of their receiving editor's copies for review and notice, they will in future be expected to pay express charges on the same. Our contemporaries are very indignant at the proposition, arguing that the publishers are amply repaid, and more than repaid, for both the cost of the books and the freight on the same, by the notices which the journals give them. Inasmuch as such editor's copies as we have received have come with cost of transportion prepaid, we have nothing, personally, to bias our feeling in discussing this proposition on the part of the publisher. The matter is purely one of business, and we see no necessity for the exhibition of any feeling in regard to it. The publishers are shrewd business men, and have, doubtless, made the proposition referred to on a purely business basis, having made an estimate of the value of the notices which their publications receive in the several journals. Our contemporaries by basing their objection to the publishers' proposition on the ground of value received, make a damaging admission. It is equivalent to declaring that their editorial space has a commercial value, and when that is once conceded they cannot, with justice, find fault with the publishers' proposition. This admission places the book review department on the same basis as the advertising department, and if the publishers decline to pay as much as they have been heretofore paying, it is their commercial privilege. The admission once being made, the editors, to be consistent, should estimate the value of the space devoted to the book notice, and after crediting the publisher with the value of the merchandise received, collect or remit the difference.

As regards the publishers we cannot but think that they have made a mistake in this proposition, which they will lose no time in rectifying. From our experience with them we

cannot believe that they regard the notices given their books by medical editors, as mere commercial commodities. Doubtless, the expense of sending copies for review and notice in the many medical journals of this country, is very considerable, and, possibly, they believe that the commercial value of notices in different journals varies. In that case it is their privilege, as business men, to seek to adjust the expense to the value received. The proposition to medical editors to adjust this relation by a cash remittance of the cost of carriage of the books (for this is what their proposition practically amounts to) carries with it an implication which we cannot believe is deliberate.

As far as this journal is concerned, we have simply to say that such notices of books as we give are given for the benefit of our readers, and without any reference to their commercial value to the publishers. If the publishers consider these notices of any commercial value they are welcome to it, and we shall not attempt to adjust the difference between this value and the market price of the books. It matters not to us whether our notices are valuable or otherwise, as affecting the sale of the books, and when the publishers seek to fix a commercial value on our editorial columns we shall quietly inform them that these columns are not in the market. We appreciate the courtesy of receiving books without expense to us, for should they not thus come to us we should be put to the expense of purchasing such publications as we might think our readers would be interested in having noticed. In the chronic stringent condition of an editor's finances such purchase would at times cause us some inconvenience, and for the prevention of this the publishers have, and we are quite willing that they should continue to have, our warmest thanks.

OBITUARY—DR. ISAAC S. SMITH.

Another of the connecting links between the distant past and the present, has been severed, in the death of DR. ISAAC S. SMITH, of this city. DR. SMITH was the oldest of our local physicians, both in years and in length of continuous practice, having been born March 1st, 1804, in Orange County, N. Y., and commencing to practice in 1828. He was the son of a physician, his father being the author of Smith's Botanic Physician, a work which was held in high esteem by American physicians at the beginning of this century, and which passed through three large editions, the last of which was edited by the subject of this notice, in 1844. DR. SMITH was a student of the elder VALENTINE MOTT, in 1828, but before being graduated was called home to take charge of the extensive practice built up by his father, who was incapaciated by what proved to be his last illness. The care of this practice prevented his return to college until the year 1833, when he took his degree, after securing which he settled in New York City, where he served for several years as Demonstrator of Anatomy. He was married in 1827 to HANNAH FLEMING, who died two years afterwards. In 1831 he married JULIA ANN CLARK, who now, with her daughter, MRS. BENJAMIN P. FISH, of this city, survives him. During his residence in New York he was commissioned surgeon of the 27th N. Y. State Artillery. He took great pride in later years in showing his commission, which bore the signature of the late W. H. SEWARD.

In 1846 DR. SMITH removed to Michigan, opening an office in that year in Detroit, where he practiced until 1857, when he removed to a farm in Grosse Pointe, on the banks of Lake St. Clair, nine miles from the city. He practiced his profession there until two years ago, when he returned to the city to end his days. In 1850 he made a trip to the Pacific ocean as surgeon on the steamship Northerner.

Through an accident eighteen months before his death, DR. SMITH received a fracture of the neck of the femur, and was, in consequence, confined to his room for the remainder of his days. He was, up to the time of this accident, a man of remarkable bodily vigor, and was a regular attendant at the meetings of the Wayne County Medical Society, of which he was a member.

DR. SMITH was emphatically a gentleman of "the good old school," upright in his conduct, punctilious in his honesty, and exceedingly companionable, his conversation abounding in reminiscences. Among these was his experience in the war of 1812, when as a lad of nine years of age, he bore a message from GENERAL SCOTT to GENERAL IZZARD, before the battle at Black Rock, near Buffalo, safely accomplishing his task after a perilous journey of ten miles. He afterwards witnessed the battle, and assisted a field surgeon at an amputation of the thigh. He was gifted with a very retentive memory, and his narration of details was instructive and full of interest. He served as Provost-Marshal during the war of the rebellion. In politics he was a republican, and in religion he was a Baptist, having joined that denomination when fifteen years of age. Fortunate investments in real estate enabled him to leave a very ample fortune, which is inherited by his wife and daughter.

THE QUESTION OF FEES.

The question of how much may a physician charge for his services is one which has frefrequently come up in courts of justice, but has never been decided in such a way as would form a basis for subsequent cases. Usually the fee-bill adopted by the local medical society,

where such fee-bill exists, has decided, and in the absence of such guide the evidence of practitioners as to their customary charges has been depended on. Both of these methods are, however, objectionable, since they do not take into consideration the comparative value of the services rendered by different practitioners. A, who has had a thorough education supplemented by a quarter of a century's study and experience, is by them placed on the same footing as B, who may have a very defective education and little experience. The difficulties of the case are thus apparent, and we have not yet come across any practical solution of them. The physician's fees are thus fixed in a very arbitrary manner, and until some just method of adjusting them is devised, any suggestions are full of interest. MR. HENRY A. RILEY, in a communication to the Medical and Surgical Reporter, quotes the following from remarks made by a New York professor of medical jurisprudence:

"A physician is, of course, completely at liberty to establish a standard of charges as high as he pleases, and he may make it so high that none but millionaires will be able to employ him. No one can object to this. If, then, de does give professional attention to a person who is unable to pay such fees, and chooses to charge him at a lower rate than his custom would warrant, this, also, would be a simple act of charity, to which no one could object. But for a doctor deliberately to add to his usual rate of charges an amount based simply upon the supposed ability of his patient to pay, seems to me to be lowering your profession to the level of soulless usurers, and sacrificing all that is high and noble and philanthropic in it to the mere love for lucre. I do not know that the precise question has ever been presented in this country, but I doubt very much whether our courts would sanction any such practice."

IRRIGATION OF THE ALIMENTARY CANAL WITH ARTIFICIAL SERUM AS A REMEDY FOR COLLAPSE AFTER INFANTILE CHOLERA.

These tissues are used by DR. HAL C. WYMAN to indicate a novel method of treating the later stages of cholera infantum. The method has, he says, stood the test of thorough trial. The plan is to take a half drachm each of chloride of sodium and bicarbonate of sodium, and dissolve them in half a pint of pure water, or water recently boiled. This solution is then allowed to trickle in drops from the finger of the nurse into the mouth and throat of the little patient, at intervals of three or four minutes. This is kept up for six hours, no other food being used, when the finger is dipped in fresh cow's, goat's, or mother's milk, and given as above, alternately with the serum, at frequent intervals of several minutes, for a period of three or four hours, when a small quantity of milk can be given and retained. If, however, it provokes vomiting or diarrhœa, the irrigation with serum solution is again resorted to until the pulse and skin show that the circulation is in better condition.

The beneficial effects of this plan is supposed to be due to the peculiar power certain saline solutions have over muscular contractility. If the œsophagus of a sturgeon be removed from the fish and stimulated at various intervals afterwards, it will be found to retain the contractile powers of its muscle fibres for several hours after all means of communication with the central nervous system have been removed. After a time, however, the irritability is exhausted, but if the mucous surface of the muscles is now bathed with the saline solution before mentioned of temperature of 98° or 100° F., contractility may be excited in response to stimulation, which before was unavailing. The heart sac is, after its removal from the body, easily re-excited to muscular contraction by flooding its ventricles with this solution heated to a proper temperature. The continuous, almost, application of a solution known to promote the contractile power of muscle, to the alimentary membrane, in quantity too small to excite vomiting, cannot fail to penetrate by infiltration through the epithelial investment of the muscle and nerves which regulate the quantity and quality of the digestive ferments. Such imbibition means the renewal of the osmotic currents which keep up the serous discharges from the bowels, and that means better blood out of which to manufacture digestive ferments.

THE "NOBLE FOREHEAD" FALLACY.

It is popularly supposed that the high forehead is essential to a good brain, and intellectual superiority is usually associated with the conception of a "two-storied brow." DR. WM. H. MAYS ably combats this idea, in the Western Lancet. He says:

"The size of the forehead depends much on the line of growth of the hair that limits it. A man may have what is called a low forehead, but if the hair could be removed to the height of four or five inches, the same individual would present as fine a specimen of the traditional "noble forehead" as could be wished, a perfect "dome of thought," particularly if the frontal sinuses happened to be large or protuberant. Again, a low forehead has ever been held a sign of beauty in woman, and has certainly never been regarded as an impeachment of her mental capacity. The truth is, the front part of the brain has very little to do with the intellectual process. It is the posterior lobes

of the brain with which the higher faculties of the mind are associated. GOWER assigns to the frontal lobes, excepting their lower and hinder portions, a negative position as regards psychical importance. Only man possesses posterior or occipital lobes; they are the latest achievements in the long line of cerebral development. In the higher apes they may be found in a very rudimentary condition; the lower mammals possess frontal or anterior lobes only. In the lower savages, and in congenital idiots, the occipital lobes are often ill-developed, approaching the brute type, giving a flattened appearance to the back of the head. In the Stockton Asylum are several interesting idiots, some of whom, while possessing quite respectable foreheads, show a striking deficiency of backhead. The neck and back of the head are in one line, and it is worth remarking what a foolish appearance such a contour gives an individual. When you see a lack of the rounded sweep or projection of the back of the head above the neck, you will find with it a low order of intellect. The idea that a high forehead is, taken alone, the index of mental superiority is as baseless as any of the exploded propositions of phrenology, with which pseudoscience it deserves to be classed."

Notes.

DR. JOHN S. BILLINGS thus describes the American physician, in his address before the British Medical Association: "I have spoken to little purpose if I have failed to show you that there is a great deal of human nature in American physicians, and it is a kind of human nature with which you are tolerably familiar. Our ancestors were restless, fighters, freebooters, and from these ancestors we have the common inheritance of energy; of what we call "firmness," and our opponents unreasonable, pig-headed stubbornness; of liking to manage our own affairs, and, at the same time, to exercise a little judicious supervision over those of our neighbors; of hatred of humbug and lying; and in spite of our discontent, of a firm belief that our wives and children, habits and houses, mode of business and of treating disease, are, on the whole, better than those of any other people under the sun. Privately, and between ourselves, we grumble and declare that the country and the profession are going to the dogs—nay, we must do so, or we would not be of true English blood; but there is no need for me to tell you that these are only 'growing pains,' and not symptoms of progressive ataxy."

More editorial amenities: The Weekly Medical Review says that "the able, gentlemanly senior editor of the Kansas City Medical Index allows his cub too much license." In commenting on the Texas Courier Record's statement that LAWSON TAIT operates in his own hospital, keeps his patients under his own hands, watching them with much care, and exercising the greatest cleanliness, our St. Louis contemporary says: "Yes, and even though he does all this, we would as soon believe that he could turn water into wine, raise the dead Lazarus, feed five thousand hungry travellers with five loaves and seven fishes, or perform any other miracle, as to swallow his statement that he had operated 138 consecutive times on as many unselected cases of ovarian tumor without a single death," which remark excites a sort of suspicion that Kansas City does not have a monopoly of the cubs.

The following is PROFESSOR ROBERTS BARTHOLOW'S estimation of the people "out west," as published in the Maryland Medical Journal: "An uncouth and ignorant people would not appreciate, would not indeed understand, a polished physician, full of the culture of the schools. PROF. CHARCOT and SIR WILLIAM JENNER, equipped with all the resources of scientific medicine, would fail to please the people of Egypt in Southern Illinois, when a botanical physician, with lobelia and No. 6, would excite their enthusiastic admiration." If this be true, Egypt furnishes a fruitful field for DR. RAUCH'S State Board of Health, but we cannot believe that even Egypt is quite as bad as this.

DR. MILNER FOTHERGILL gives the following succinct account of the pathology of gout (Medical Record): "When kidneys first appear in the animal kingdom, the form of urinary secretion is uric acid. Uric acid belongs to animals with a three-chambered heart and a solid urine (reptiles and birds). The mammalia possesses a four-chambered heart and fluid urine, the form of urinary secretion being the soluble urea. When the human liver becomes depraved or degraded, it has a tendency to form primitive urinary products. To the question, 'What is gout?' the answer is: 'Gout is hepatic reversion, when primitive urine is formed by a mammalian liver.'"

In the announcement of the Minnesota Hospital College of Minneapolis, for 1886–7, we notice on the list of professors the name of our townsman, DR. HAL C. WYMAN. PROF. WYMAN will deliver a special course of ten lectures on Surgical Physiology during the winter. We congratulate this wide awake institution on its selection. The subject is unique in the curriculum of a medical college, but that it will be ably handled there will exist no doubt in the minds of those acquainted with the incumbent of the chair. DR. BELFIELD, of Chicago, an-

other judicious selection, will also deliver a special course, his subject being Bacteriology.

A breach of promise suit has just been decided in England against a doctor. Among the endearing passages in the letters which were offered in evidence, were the following: "You had better wash your face in spirits or brandy for I mean to make it so sore that you will not be able to rest on your pillow for some time." "Darling Kate, how kind of you to send anything to enliven life here; you had better send yourself, labeled 'this side up.'" The damages to the young lady's affections were assessed at fifty pounds. The incident is recorded as a warning to American doctors.

Daniel's Texas Medical Journal states its DR. MERRYMAN is acquainted with an *ine* which is many thousand times sweeter than Saccharine, the recently discovered principle of coal tar, which is estimated to be two hundred and thirty-seven times sweeter than cane sugar. The name of our contemporary's "principal" is Cather-ine. Cather-ine is, unquestionably, very sweet, but for superlative dulcitude, com mend us to Angel-ine.

A plump, healthy child, weighing, including the handkerchief and shawl in which it was swaddled, two pounds and six ounces, is reported as having been recently born in Utah. Another illustration of the demoralizing effects of the "twin relic of barbarism." Polygamy must go. This sort of thing cannot be tolerated.

An Irishman was being sued for non-payment of his doctor's bill. In answer to the judge's inquiry why he refused to pay, he said: "What for should I pay? Shure he didn't give me anything but some emetics, and divil a wan of thim could I kape on my stomach at all, at all."

A Vassar graduate, out in the country, went into the stable of a farm house. "Dear me, how close the poor cows are crowded together," she remarked. "Yes, mum, but we have to do it." "Why so?" "To get condensed milk, mum." The sweet girl graduate went off relieved and enlightened.

SIR ANDREW CLARKE declares that one-half of the population of London is permanently ill. His definition of health is: That state in which the body is not consciously present to us: that state in which work is easy and duty not over a great trial; the state in which it is a joy to see, think, to feel, and to be.

The profession in the sections indicated by the dark spots on DR. BILLINGS' map, do not feel complimented by this map. These dark spots were originally designed to indicate the prevalence of malaria, but DR. BILLINGS claims to have discovered that the quality of the profession in those sections is below the average.

"Ah! good morning, BROTHER SHEARS; glad to see you. And how are things up your way?" "Oh! they are flourishing at present, but last month we had the hog cholera pretty bad." "I am very sorry to hear that. But you are looking well now, BROTHER SHEARS."

Johnnie wanted to know of his father the difference between a ripe old age and a green old age. Father is still engaged in the solution of the question.

A Topeka mother, on being asked by the doctor whether her boy's bowels had moved, replied: "Oh, yes, he had a copious evacuation of the rinctum."

"Time," says OVID, "is the best doctor." "True;" remarks BOB BURDETTE, "time will even cure a ham."

Book Notices.

NEW MEDICATIONS. By Dujardin-Beaumetz, M. D. Translated by E. P. Hurd, M. D. Published by Geo. S. Davis. Detroit, Mich.

The subject of modern therapeutics, both with the profession and the public, must be regarded as one of the most important with which the mind can be occupied. Of late years, naturally enough, many works have been written upon it, of more or less merit, but few, if any, capable of excelling the work under review, the author of which has had the advantage of scientific attainments, with a private and hospital practice enabling him to test his theories and remedies under the most favorable conditions. He has struggled for the facts no matter at what expense to old time notions and preconceived opinions, and his work cannot fail to become of high authority with all enlightened and candid practitioners. Most appertaining to therapeutics will here be found in the happiest English dress, for which we are indebted to the general and professional learning of DR. HURD.

DR. DUJARDIN-BEAUMETZ appears generally accurate in his statements, and generous enough to give every one with whom he deals, his full due, his opponents, even, being treated not simply with fairness, but liberality. Nor have the homœopaths reason to complain, DR. HERING receiving the credit of having first introduced Glonoine (Trinitrin) into therapeutics, the usefulness of which is candidly pointed out. We find much originality of thought and ingenuity in his experiments, as well as a solid

foundation of common sense, which gives the volume a character most acceptable with all enlightened men.

Dr. Dujardin-Beaumetz is very fortunate in his translator, a man not only of scholarly attainments, but of true professional zeal. His acquaintance with the author, with whose views and aims he stands in thorough sympathy, peculiarly qualified him to introduce the celebrated Parisian physician to the great English-speaking world.

We would call special attention to the chapters on Pulmonary Medication, with the new antithermic remedies and new hypnotics. That on Local Anæsthetics will amply repay perusal. The article on "The Pneumatic Cabinet" constituted as an addendum by Dr. W. J. Smith, is also well written, besides being of a practical character. Dr. Dujardin-Beaumetz espouses Pasteur's views to the extent of believing in the possibility of preserving the human race from tuberculosis, by inoculation with its attenuated virus. Meantime he proposes air and superalimentation as a means of preventing people from becoming an easy prey to the bacilli. He believes superalimentation by means of meat powders (by enforced "gavage," if necessary,) will ameliorate and even cure pulmonary phthisis. He is surprised that the homœopaths, who lay so much stress upon hygiene, should not adopt a vegetable regimen, as proposed by Dr. P. Jousset. The latter states that phthisis is not due to debility, but to a complex condition, adding that after hæmorrhage or prolonged abstention from food, there is an anæmia—debility, but never phthisis as a consequence. Dr. Jousset also contends that statistics show deaths to be the most numerous among people who use meat and alcohol most freely. Vienna, London and Paris are instanced in support of his theory, death from consumption being therein the most numerous. The rural population of Normandy use much meat and alcohol, and in Brittany much liquor but little meat, and consumption is more prevalent in the former. We are further told that in monasteries, where little meat is consumed, but vegetables are liberally used, consumption is hardly known. Jousset, therefore, advises milk, eggs and farinaceous substances for his phthisical patients, while excluding meat, with, he believes, considerable benefit. With this regimen, they gain flesh and improve generally, and, as is well known in such cases, the moment the subject increases in weight, his disease begins to diminish.

Of course this book does not exhaust the subject, but it contains a treasury of therapeutical facts, with regard to the medicines introduced during the last fifty years, which no physician who desires to do the best for his patients can afford to ignore. If Dr. Hurd has any sins as a translator, they are of the venial sort; but he is sometimes over-sensitive about repeating a word in a sentence. Such scrupulousness accounts, probably, for the employment of words like "lavation," "medications," "felicitate," etc. But for our part we would prefer such a repetition, now common enough with the best writers, to any device or importation giving the English presented a foreign flavor.

The chapter on New Cardiac Remedies is pregnant with interest and information, deserving careful study. But we are surprised not to find amyl mentioned, which is one of the most powerful heart stimulants we have. Dr. Dujardin-Beaumetz strongly advises hamamelis, internally, for hæmorrhoids of the venous variety; its local application at the same time will greatly expedite the cure. The chapter on Lavage and Gavage has already appeared in the volume entitled Diseases of the Stomach, but is fittingly introduced in this work, which is sure to produce a good impression, both by stimulating thought and supplying practical information on subjects of great interest to the medical profession and the public.

Long Life and How to Attain it. By Andrew J. B. Jenner, M. D. Member of the American Public Health Association, etc. Price: Limp cloth, 50 cents. Cloth Boards, $1 25.
Detroit: Phillips & Hunt.

Dr. Jenner has been quite prolific of books of this class during the past year or so, the success of his first venture having encouraged him in the effort. The book before us is the most pretentious of the series, and is, indeed, a book of very considerable merit, and differs from the rest in being of a kind better calculated for professional as distinct from lay readers, although the more intelligent among the latter may read it understandingly. The book is one which should be extensively read, particularly by the class who regard money-making as the highest object of life, and who practically sacrifice every other consideration to it. It teaches that a long life and a happy one can only be secured through obedience to the inflexible laws of nature, and it is essentially a treatise on physical, mental and mortal hygiene. We cordially commend it to the class of readers who stand most in need of it, and for whose reading it is designed.

A Reference Hand-book of the Medical Sciences, embracing the entire range of scientific and practical medicine and allied sciences, by various writers. Illustrated by chromo-lithograghs and fine wood engravings. Edited by Albert H. Buck, M. D. New York City. Volume III. New York: Wm. Wood & Co.

The third volume of this most comprehensive work on medicine and its allied sciences, is now

ready for delivery. Of the general scope of the work we have had occasion to speak in noticing the previous volumes. The present volume contains upwards of 800 pages, and embraces all subjects, either remote or immediate in their bearing on medicine, arranged in alphabetical order between "face" and "hysterotomy." The illustrations are simply perfect, being beautiful samples of the perfection to which the art has attained. The work promises to be a complete library in itself.

A Treatise on Electrolysis and its Application to Therapettical and Surgical Treatment in Diseases. By Robert Amory, A. M., M. D. (Harvard), Fellow of Mass. Med. Society, etc.
New York: Wm. Wood & Co.

This volume is the August number of Wood's Library for the current year. It fills a want in the case of practitioners who conscientiously endeavor to give their patients the benefits of the latest advancements in the art of healing. Its discussion of electricity as a physical force and as a modifier of living tissue, and of the methods of generating, regulating and applying it, is quite eminently practical, as well as concise. This volume adds much to the completeness of the Library.

Therapeutic Brevities.

Hager's Catarrh Remedy.—The formula recommended by Dr. Herman Hager is as follows:

Carbolic acid, 10 parts.
Alcohol, 10 parts.
Water of ammonia, 12 parts.
Distilled water, 20 parts.

Take two ounce, wide-mouthed bottles, fill them to one-third with the above liquid; then introduce a bunch of (absorbent) cotton of sufficient size to soak up all the liquid.

To be used in incipient cold in the head, coryza, chronic catarrh, etc.

A stronger preparation, also recommended by Hager, is the following:

Carbolic acid, 10 parts.
Oil of turpentine, 5 parts.
Water of ammonia, 12 parts.
Alcohol, 20 parts.

To be used in the same manner as the preceding.

Hager recommends these as prophylactics against diphtheria. He advises all those who handle and are about patients suffering from diphtheria or phthisis, to place a vial with this *olfactorium* to the nose when they approach the patient.

Memorizing Doses.—Dr. G. A. Wiggins, of Philadelphia (Med. World, Aug., 1886), gives some general rules with their exceptions, which are thoroughly reliable.

1. The dose of all infusions is 1 to 2 ozs., except infusion of digitalis, which is 2 to 4 drs.
2. Dose of all poisonous tinctures is 5 to 20 minims, except tincture of aconite, which is 1 to 5.
3. Dose of all wines is from ½ to 1 fl. dr., except wine of opium, which is 5 to 15 minims.
4. Of all poisonous solid extracts you can give ½ gr., except extract of calabar bean, which is $\frac{1}{16}$ to ¼ gr.
5. Dose of all dilute acids is from 5 to 20 minims, except dilute hydrocyanic acid, which is 2 to 8 minims.
6. Dose of all aquæ is from 1 to 2 ozs., except aqua lauro cerasus and aqua ammonia, which are 10 to 30 minims.
7. Of all syrups you can give 1 drachm.
8. Dose of all mixtures is from ½ to 1 fl. oz.
9. Dose of all spirits is from ½ to 1 fl. dr.
10. Dose of all essential oils is from 1 to 5 minims.

Eczema of the Scalp.—Borax, says Deligny (L'Eczema, Paris, 1885), is the best application in scaly-eczema of the scalp, not only in cleansing the head, but in arresting the desquamation. Michele recommends:

℞ Sodii biborat., gr. cl.
Alcoholis,
Aquæ rosæ, ää f ʒ iv.
M.

Boric vaseline is an excellent preparation which is often employed at the St. Louis Hospital:

℞ Pulv. acid. boric., ʒ iss.
Vaselini, ℥ j.
Bals. Peruv., gr. viij.
M.

Besnier applies two to three folds of thin muslin wet with starch water, a teaspoonful to the quart of water, and covers this with a rubber cloth in crusted eczema of the scalp. If there is fœtor, he adds 75 grains of boric acid to the quart of water. When all inflammation has disappeared, he recommends the addition of 15 grains of sulphate of copper to the quart of water, to be used with discretion.—*Med. Times.*

Cough Mixture for Horses.—The correspondent incloses a formula from the Farm and Hearth, which was given in reply to a subscriber, who wishes a remedy for his horse's cough. S. F. H. asks: "Would it not be liable to stop the cough *too effectually* for the owner's advantage?"

The formula reads:

Hydrocyanic acid, ʒ iv.
Powd. ext. of licorice, ʒ i.
Laudanum, ʒ ij.
Camphor water, ʒ xv.
Mix and give two ounces three times a day.

Dilute hydrocyanic acid is evidently intended In fact, it is not customary to prepare an acid of a greater strength.

Oil of Turpentine in Scrofulous Ozæna.—Malacrida (Gazz. degli Ospit., Mar 7, 1886; Centrlbl. f. Chir., July 17, 1886) reports the case of a girl ten years old who had ozæna of long standing, which had long been under treatment in vain. Taking a suggestion from the cure of old fistulous tracts with oil of turpentine, the author used this drug locally, and gave the patient a supporting diet. Cotton tampons moistened with a few drops of the oil were introduced into the nose. As they caused considerable irritation, those subsequently used were wrapped with dry cotton. A perfect cure took place in a week. Five other cases treated by the same method are mentioned, in none of which was the cure delayed longer than a month.—*N. Y. Medical Journal.*

Bromide of Arsenic in Diabetes.—Mook (Frace méd., Feb. 25, 1886; Glasgow Med. Jour, July, 1886) reports the case of a woman fifty-four years old, who had probably had diabetes about four years, and who also had phthisis in the stage of cavity. She was much troubled with itching of the vulva. Small doses of bromide of arsenic were given, together with iodoform, and in two weeks the pruritus had entirely disappeared and the chest symptoms were much ameliorated. At first she was given gluten bread, but afterward she was allowed ordinary bread toasted. The improvement continued steadily for two months, at the end of which time the amount of sugar passed in the urine had been reduced to not much more than one twentieth of the original quantity, and the chest symptoms were quite checked, although a cavity, of course, remained.

Dr. N. S. Davis (Jour. of the Amer. Med. Assos, May 8, 1886) has reported excellent results with bromide of arsenic in conjunction with a strict anti-diabetic diet.—*N. Y. Medical Journal.*

Night-Sweats in Phthisis.—Ablestoff, according to the Lancet, has made a careful study of the effect of various drugs upon night-sweats. He finds that hydrochloride of pilocarpine, even in doses of from one-sixth to one-eighth of a grain, not only fails to diminish the sweating in most cases, but renders the patient's condition worse, by reason of the gastro-intestinal irritation which it produces. Neither does this drug possess the superior expectorant properties that have been attributed to it. Duboisine, picrotoxin and homatropine certainly reduce the amount of perspiration; but, as the use of the two former drugs may be followed by unpleasant effects, homatropine is to be preferred in phthisical cases.

Iodol in Gynæcological Practice.—Dr. Meniere has used iodol with good results in cases of granular degeneration and erosion of the cervix. He uses a solution containing:

Iodol, 1 part.
Glycerin, 15 parts.
Alcohol, 30 parts.

He has also used the solution with equally favorable results in a few cases of muciparous inflammation of the vulva in young lymphatic subjects.—*N. Y. Med. Journal.*

Charcoal and Camphor in Cronic Ulcer.—A mixture of equal parts of camphor and animal charcoal is recommended by Barbocci as an application to prevent the offensive odors and remove the pain of old excavated ulcers. The camphor acts as a disinfectant, and the charcoal absorbs and destroys the offensive odors.—*Brit. Med. Journal.*

Medical Progress.

Whooping-cough Treated by Nasal Insufflations of Boracic Acid and Coffee.—Dr. T. Guerder made the following communication at a recent meeting of the Society of Practical Medicine. In the beginning of last February an epidemic of a severe form of whooping-cough broke out at Pontcarré; infants were especially attacked. At first the disease was treated by fumigations of carbolic acid in the patient's rooms, and the administration of belladonna, carbolic acid, and bromide of potassium, with syrup of poppies. The fits of coughing became less frequent, and the reflex excitability was favorably modified; but when the treatment was suspended, the cough assumed its original violence. On account of the extreme susceptibility of many of the children to belladonna poisoning, it was frequently necessary to discontinue the use of the syrup. In the case of a boy, aged 4 years, two teaspoonfuls caused the pupils to dilate, and delirium ensued. Whooping-cough requires protracted treatment, and it was not advisable to administer narcotics to young children for several weeks, even when they could be tolerated. The presence of nasal catarrh, with congestion of the pituitary mucous membrane,

and the probable parasitic nature of the complaint, suggested to DR. GUERDER the advisability of local treatment similar to that which had been successful in hay-fever. The probability that fits of whooping-cough might be attributed to a nasal reflex action determined fits of coughing or attacks of asthma. Nasal insufflations were practiced with a very fine powder composed of boric acid and dried coffee in equal parts. The insufflations were effected by means of a form of nasal insufflator which scattered the powder whilst projecting it into the nostrils, and thus prevented any accumulation on a limited area of the mucous membrane. This detail was of importance, inasmuch as when the treatment was first adopted it was unsuccessful, because the mothers did not understand how to effect the insufflation; but there was a marked improvement when it was performed night and morning by a physician. Thirty children were treated in this way; seven of them were scarcely a year old, seven were from one to two years old, six from two to three, and ten from three to eight. Among these thirty children, thirteen had been treated for a week or a fortnight with the syrup above mentioned, and a very decided improvement was noticed, but only of short duration. The remaining seventeen were exclusively treated with nasal insufflations, not taking any other medicine, excepting one or two emetics during the catarrhal period. Out of the thirteen children treated with syrup during the first period, from February 5 to February 10, three had attacks of intercurrent pneumonia; two children of 7 and 11 months succumbed, the other, 8 years old, recovered. It should be noted that, during the attack of pneumonia, the fits of coughing entirely subsided, but returned with the same violence during convalescence. From the day when nasal insufflations were employed, no further complications ensued, nor did any more deaths occur.

The new treatment was begun on February 19, with the boy, aged four, already referred to, who was unable to take belladonna, and who had fits of coughing every hour, night and day. At the end of forty-eight hours, and after four insufflations, the fits of coughing only occurred four times during the night, and five or six times in the day. When the treatment had been continued for a week, only one or two slight attacks of coughing came on during the twenty-four hours. With all the other children, the results were the same when the insufflations had been well performed. In a short space of time, varying from two days to a week, the fits of coughing generally diminished from twenty to fifteen, or even less, in twenty-four hours, and they grew less violent; vomiting and epistaxis also became less frequent. These results were simultaneous with the diminution of the coryza. In half the number of cases, it was observed that, after an improvement was obtained, further progress was slowly effected, but the cough did not thoroughly subside until a fortnight had elapsed. When timely medical aid was obtained, nasal insufflations were performed at the onset of the complaint during the catarrhal period. In these cases, the attack was comparatively slight, and there was complete recovery in about a week or fortnight, and sometimes sooner. In three cases especially, there was a positive abortive influence, and the cough was not periodical; it is possible that these were cases of simple catarrh; nevertheless, the children were in daily contact with others suffering from whooping-cough. Eighteen children had been treated with insufflations of boric acid and powdered coffee, when an article appeared by M. GRASSET giving an account of an analogous treatment in whooping-cough adopted by HERR MICHAEL, of Hamburg, who, after trying insufflations with various powders, preferred pulverized benzoin. The results he obtained were as successful as DR. GUERDER'S. The latter then tested the value of pulverized benzoin; the success was equal to that resulting from the use of boric acid and powdered coffee, but recovery was slower. In conclusion it may be stated, with regard to the subject of DR. GUERDER'S memoir, that the method of nasal insufflations constitutes a simple treatment, which has proved to result in one of the most efficacious and rapid cures for whooping-cough hitherto known. It seems better calculated than any other remedy to modify morbid conditions occurring in the complaint, such as vomiting, hæmorrhage, and emaciation, as well as any other complication, such as pneumonia.—*Med. and Surg. Reporter.*

DELAFIELD ON THE TREATMENT OF CHRONIC GASTRITIS.—The treatment was thus laid down by DR. FRANCIS DELAFIELD before the Association of American Physicians in Washington:

I. CLIMATE AND MODE OF LIFE.

These I believe to offer the most certain means of curing chronic gastritis. It is unnecessary to lay down rules as to the sort of climate, that can be regulated by the tastes of the patient. The two points of importance are: First, the locality selected must be one where the patient can lead an out-of-door life. Second, the patient must live in this climate either for several years, or for a considerable portion of each year.

II. THE DIET.

The regulation of the diet is a matter which demands consideration in every case of chronic gastrites. In trying to ascertain the best way of feeding these patients, I have found only one satisfactory method, and that is to feed them experimentally with different articles of food, and then after an interval of several hours wash out the stomach, and see how thoroughly these articles of food have been digested and removed from the stomach. After pursuing this course for a number of years, I have arrived at the following conclusions:

It is necessary that the patient should be well fed; starvation diet never answers.

The stomach does not require any rest from the performance of stomach digestion; on the contrary, it is all the better for being called on to perform its natural functions.

The patient's own ideas as to what food agrees with them are usually erroneous. They are apt either to starve themselves or to select the least nutritious articles of food.

The use of artificially digested foods, or of substances such as pepsine to assist stomach digestion, is unnecessary.

The starches, oatmeal, corn meal, bread, the cereals, the health foods, are as a rule bad. Portions of them remain undigested in the stomach for many hours.

Milk in adults is an uncertain article. It answers very well for some patients, not at all for others.

Meat is usually readily and well digested, but there are occasional exceptions to this rule.

Vegetables and fruit can be eaten, but the particular varieties must be selected experimentally for each patient.

I do not believe that any case of chronic gastritis is to be cured by diet alone. Even the exclusive milk diet, while it often relieves symptoms, is as a rule only temporary in its effect, so that the patient simply loses a certain amount of time by employing this instead of more efficacious plans of treatment.

III. THE ADMINISTRATION OF DRUGS.

The advantageous use of drugs belongs to the earlier stages of chronic gastritis. At that time they often palliate symptoms and sometimes even seem to cure the inflammation. In the latter stages of the disease their use becomes more and more unavailing. The reliable drugs for this purpose are not numerous; the preparations of soda, potash, and bismuth, the mineral acids, glycerin, sometimes carbolic acid, sometimes iodoform, sometimes the bitter infusions. If none of these answer, it is hardly worth while to look any further. If we can combine with the administration of drugs, the regulation of the diet and of the mode of life of the patient, then of course our chances of success are much greater.

IV. THE USE OF LOCAL APPLICATIONS MADE DIRECTLY TO THE MUCOUS MEMBRANE OF THE STOMACH.

This I regard as the most efficacious plan of treatment for those patients who are not able to leave home and seek a proper climate, but ask to be relieved without interruption to their ordinary pursuits. The local applications are readily made by the introduction of a soft rubber tube through the œsophagus of the stomach.

Liquid applications are the best. They should be made in such quantities as to come thoroughly into contact with the entire surface of the mucous membrane, although the pyloric end of the stomach is the region where the inflammation is principally situated. They should be made at a time long enough after eating for the stomach to be as nearly empty as possible.

For many cases warm water alone in considerable quantities is the only local application needed. In some, however, there is an advantage in medicating the water, and for this purpose I employ a variety of substances.

The alkalies, the mineral acids, bismuth, carbolic acid, the salicylates, iodoform, belladonna, ipecac, gelsemium, may each one be employed according to the particular case.

For the first week it is often necessary to put the patient on a milk diet, and this can be done even with those patients who under ordinary circumstances cannot take milk at all.

Then, after a time, to the milk we add one solid meal composed of meat alone. Next, this single meal is increased by the gradual addition of fruits, vegetables, and bread. Then comes the giving of two solid meals a day instead of one, then three solid meals, and now we get rid of the milk in part or altogether.

For the first week of this treatment it is wise not to expect any special improvement. Indeed, even a longer time than this may try the perseverance of the physician and the confidence of the patient.

Sooner or later, however, the expected improvement begins: the nausea and vomiting cease; the constipation or diarrhœa is improved; the flatulence is no longer troublesome; the headache becomes less frequent; and of more real value than these, the improvement in the general condition of the patient becomes evident. The color, the weight, the appetite, the sleep, the spirits of the patient, all show a change for the better. Of all the symptoms, the pain is the one which is apt to persist the longest.

For two or three months the patient has to be kept under observation, and the applications to the stomach made by the physician. After this, the patient is dismissed, but continues the treatment himself, first every other day, then twice a week, then once a week for several months. The regular relapses of the disease are managed in the same way, but are much more quickly relieved.—*Med. and Surg. Rep.*

FIFTEEN HUNDRED CASES OF SYPHILIS TREATED BY SUBCUTANEOUS INJECTIONS OF MERCURY.—J. ASTLEY BLOXAM, F. R. C. S., Eng., in a clinical lecture, reported in London Lancet, Aug. 21, 1886, gives the following interesting details of the application of the subcutaneous employment of mercury in syphilis:

The lecturer mentioned the excellent results which he had obtained at the Lock Hospital and elsewhere in the treatment of syphilis by intra-muscular injections of a solution of the perchloride of mercury. The solution for injection contains six grains of the perchloride to the ounce of distilled water, and should be made fresh for each *séance*. Since we have adopted this method, now a period of some eighteen months, upwards of 1500 cases had been treated with the best results. The sore generally begins to heal very promptly after one or two injections, the secondary symptoms are markedly modified, and after a course of treatment extending over a year, more or less, the patient is enabled to discontinue his attendance. Towards the latter end of the course of treatment the injections may be given less frequently, and as a general rule, not more than from eight to twelve grains of the perchloride are injected in all. It is undesirable to repeat the injections oftener than once a week, as otherwise salivation may be induced, and the quantity injected each time (one-third of a grain) is found to be quite sufficient until the next time. There are several advantages attending this method of exhibiting mercury. In the first instance it is only necessary to see the patient once a week, when sufficient mercury is injected to last until the following week; secondly, salivation is not produced, as when the patient continued to take mercury for a whole week away from the supervision of his

medical attendant; thirdly, the gastric derangements which are so apt to follow the administration of mercury by the mouth are by this means avoided; lastly, the ease and certainty of the administration, which enable the surgeon to do his own dispensing with a minimum of trouble. A little quinine is generally given during the course as a tonic, but no other form of mercury is administered.

The injection itself is a very simple operation, but certain rules have nevertheless to be observed in order to obviate any inconveniences which might otherwise result. An ordinary glass hypodermic syringe is used with a fine needle (the needle is apt to become very brittle from the action of the mercury on the steel and requires to be replaced from time to time), containing twenty drops of the solution, equivalent to one-third of a grain of the perchloride. After filling the syringe the needle is freed from adhering solutions by washing, in order to avoid irritation in its track, and is then plunged deliberately into the muscular tissue of the buttock, selecting for this purpose the spot corresponding to the muscular mass of the glutei into the substance of which the injection is made. If this precaution be observed, no discomfort or abscess formation follows, the only solitary case in which this has occurred being attributable to the injection having been made into the areolar tissue over the trochanter. The pain of the injection is but slight, and soon passes off. It is desirable that the patient should not take active exercise immediately after the injection, as it has been noticed that blood may be effused at the point of injection, giving rise to the sensation of a severe bruise of the part, which lasts for several days. The same effect has followed the puncture of a large vessel, but in any case the result is only transient, and disappears after the lapse of a few days. If for any reason the buttock be objected to as the site of the operation, the injection may be made into the trapezius muscle at a point two inches above the superior angle of the scapula, but the injection into the buttock is attended with less inconvenience.

Mr. Bloxam mentioned that his own opinions were stronly in favor of syphilis being bacillar in origin, thus accounting for the specific action of mercury in the treatment of the disease. In support of this view he alluded to the remarkable researches of Messrs. Eve and Lingard, whom he had furnished with blood and chancrous tissue from patients at the Lock Hospital, the subjects of syphilis. They have succeeded in detecting and cultivating a bacillus which could generally be found in the blood and tissues of syphilitic patients who had not been subjected to the influence of mercury, or who at any rate had not taken it long. In a contribution to the Lancet of April 10, 1886, they say: "In none of the cases from which cultivations were obtained had mercury been administered for any length of time, and a long series of failures have led us to reject entirely cases which have been long under mercurial treatment." With this fact in view, the importance of obtaining a thorough and certain permeation of mercury in the system is apparent, and without claiming any originality in this method of treatment, the lecturer wished to bring before them the extremely favorable results he had obtained from it.

Pessaries.—In a lecture by Dr. H.K. Leake on indications for the use of pessaries, he remarks that his method of placing them is different from that of all others who use them. He says the Sims' speculum dilates the vaginal canal and reveals to the critical eye of the surgeon its whole extent, thus enabling him to perform operations within its cavity with as much ease as those he undertakes in the exposed parts of the body. Why not use the same means to perfect fitting and introduction of pessaries? For illustration, take a case of retroversion: The patient lies in the Sims' position with the perineum retroverted by the speculum in the hands of a competent assistant. The spirit lamp used in modeling your instrument, burns brightly on a table at your left hand. You now introduce well into the uterus the Emmet's repositor, and reversing the action of the instrument, you have the satisfaction of witnessing the organ revolve into normal position. The repositor being with drawn, it is replaced by a sound, the handle of which is given in charge of the assistant, who holds the uterus in its new position until the pessary is fitted to the conformation of the vagina and cervix. Experience will enable you almost at a glance to determine the size and shape of the pessary required. Having heated the hard rubber over the flame, it is moulded as the case demands before leaving it permanently in position. Resuming control of the sound, its handle is passed through the fenestra of the pessary and the latter is passed along until the cerxix is reached, when by tilting up the lower end, or depressing the upper bar, the latter glides readily into position up behind the cervix, the sound is then withdrawn and the speculum removed.

The patient is now made to stand erect, and the final examination made. This plan seems to be the most rational of any yet recommended.

The same plan is recommended also for examining pessaries in situ for refitting, the precaution being to inspect them before removal.

All patients who have had pessaries fitted for retroversions should be instructed in the knee-chest position, and required to assume it five minutes night and morning, to lessen the strain upon the tissues and relieve obstruction to the circulation.

Special injunctions should, for obvious reasons, be given regarding the rectum and bladder, which should be kept as empty as consistent with health, and all straining and lifting interdicted. Corsets should not be worn, and undergarments should be suspended from the shoulders. Vaginal injections of hot carbolized water should be directed at least once daily, and in using them a large amount of water employed, but care must be exercised lest the pessary be floated from its position by the force of the stream.

The following conclusions seem warranted from the foregoing discussions of this subject.

First.—While there exists great difference of view as to the expediency of using pessaries, the practical gynecologist is influenced in his opinions by his own experience and will not servilely bow to the authority of those, who perhaps, rejected such aids on insufficient grounds.

Second.—The classical pressure symptoms,

weight in the pelvis, sacralgia, bladder and rectal irritation, difficult and painful locomotion, dragging pains in the hips and abdomen, etc., combined or uncombined with systemic effects are relieved by a skillful adjustment of pessaries, and must be held as an indication for their employment.

Third.—Due regard must be had for the natural mobility and normal position of the uterus in placing of pessaries.

Fourth.—Contrary to a general view, retroflexion can be redressed and maintained in position by the skillful adjustment of a traction pessary.

Fifth.—Pessaries should be fitted and placed in position with the patient in Sims' position,

Sixth.—While the evidence thus far has been discouraging as to the curability of uterine displacements by means of pessaries, we must at least acknowledge their powerful aid as palliatives, and we are justified in believing that the future will demonstrate their greater efficacy in showing permanent results.—*Western Med. Reporter.*

THE TREATMENT OF HÆMORRHOIDS.—The old division of hæmorrhoids into external and internal is useful, but is in many ways unsatisfactory. There are many varieties both of external and internal, and there is a distinct class which can scarcely be included in either, and which I have been in the habit of speaking of as intermediate.

Beginning with one form of the external trouble, the patient will give a history something like the following: He or she is in good health, and until a day or two past has never had any symptoms of rectal trouble. Quite suddenly, while about the usual occupations of the day, a sense of pain, just at the verge of the anus, is experienced, which steadily grows worse, until it becomes very troublesome. An examination is made by the sufferer, and a small, soft tumor is felt, which is very tender, and which disappears on pressure, but immediately reappears when the pressure is removed. It can be pushed within the sphincter, and the act gives relief, but it is down again in a moment.

After a few hours and some handling the patient is unable to sit with comfort; but the affair is so trivial that he does not care to go to bed, and so keeps around on his feet, and very likely applies Pond's extract. After going to bed he feels better, and the next morning imagines he is nearly well; but after an hour or two the pain is worse than ever, and the tumor is larger, harder, and more sensitive than on the day before.

If an examination now be made an external hæmorrhoid of one variety will be found.

The tumor will vary in size from a pea to a large grape, and is composed solely of blood clot. A small external hæmorrhoidal vein has ruptured, and blood has been extravasated in the delicate subcutaneous connective tissue. The blood shows black under the tightly stretched skin, and the pain is due to the tension.

There are two ways of treating such a tumor. The first and best is to lay it freely open and turn out the clot from its bed. The bistoury should be sharp-pointed and delicate, the tumor should be transfixed from the anal surface outward, and the incision should be in the line of the radiating folds. After such an incision the pain will almost instantly disappear. A little styptic cotton should be placed between the cut surfaces, a large towel folded into a pad applied to the part, and the patient told to sit upon a hard chair, with the compress under him, for fifteen minutes till there is no longer any oozing of blood. The subsequent treatment consists only in bathing with cold water two or three times a day, and the cut will be healed in three or four days.

This operation is so trivial and the relief so immediate that it is generally safe to perform it without any previous explanation to the sufferer; but should it not be permitted another plan must be followed. A cathartic containing podophyllin (pil. podophyllin co.) should be given at once, to secure two or three free actions of the bowels, the patient put upon his back on the bed or sofa, and a rubber ice-bag filled with finely-powdered ice placed against the part, and kept there till the pain subsides. Cold usually gives great and immediate relief; but should it not, a poultice may be substituted. Under this plan of treatment the patient will probably be relieved in two or three days, so as to be able to get around with comfort, provided the clot is to be absorbed. In some cases, however, suppuration will occur, and in about a week from the time the swelling first appeared it will open spontaneously and discharge a few drops of pus, to the great relief of the patient. As soon as it becomes evident that this is to be the course of events, poultices should be applied and continued.

Those who have once been troubled with this form of hæmorrhoids are very liable to repeated attacks.—DR. CHARLES B. KELSEY in *The Epitome.*

FURTHER REPORT ON THE ACTION OF SPARTEIN AS A HEART TONIC.—The Paris correspondent of the British Medical Journal in the August 7th number of that journal reports the results obtained by MM. LABORDE and LEGRIS, as narrated in an article entitled La Methode Experimentale Appliquée à l'Etude des Substances Médicamenteuses, published in the Archives de Physiologie Normale et Pathologique. These experimenters arrive at the following conclusions concerning spartein: Spartein renders the heart-beats stronger and more protracted; its action on this organ is essentially dynamogenic and central in origin. The absence of any alteration in pressure, and of peripheral or vaso-motor effects, constitutes one of the important proofs of this, and is corroborated by other phenomena; among them, those belonging to convulsions and asphyxiation, which prove a predominant influence on the medulla oblongata and spinal cord. It must always be remembered that, in frogs, a long time after actual death, even when the animal begins to dry up, the heart continues to beat rhythmically, as though spartein gave an impetus to the strength and length of the beats. MM. LABORDE and LEGRIS observed similar phenomena in newly-born puppies. No other influence proceeding from the nervous system can be supposed to act in this case than that of intracardiac ganglia. Any other hypothesis would necessitate the concomitant and direct contraction of the muscular fibres of the heart.

The myographic researches made by these investigators have not at present furnished results that warrant decided conclusions. The therapeutic properties of spartein were formulated by M. SÉE in his paper, read to the Académie des Sciences, as follows: "It revives the heart-beats and the pulse; in this respect, its action equals that of digitalis and convallamarine. As a tonic, it is more active, more prompt, and more lasting. It immediately regulates the rhythm in cardiac disturbance; in this effect, it is superior to any other medical substance. In serious atonic conditions, the heart-beats are quickened; and, in this respect, spartein resembles belladonna. The favorable modifications resulting from the action of spartein occur in one hour, or, in some cases, a few hours after its administration, and continue two or three days. When its use is discontinued, during this time the general streangth is increased, and respiration is rendered easier, but not so effectually as by potassium iodide. The urinary function is not influenced by such small doses as those hitherto used." The more recent researches made by MM. LABORDE and LEGRIS led them to endorse M. SÉE'S statement; and they further state that the action of spartein is quicker and more rapid than M. SÉE observed it to be. A daily dose of sulphate of spartein varies from five to twenty-five centigrammes. When the action of the heart is weak, either from alteration of tissue, or because it cannot overcome the obstacles offered to the circulatory system, the prompt action of spartein renders it invaluable. In heart-disturbance requiring immediate treatment, in instances of asystolia its use is preferable to any other drug. In all cases of weak heart with asthenia, sulphate of spartein should be used, whether there be lesion or not. MM. LABORDE and LEGRIS declare that they do not know any conditions that should be regarded as contra-indications to the use spartein. It is not a cumulative substance. In small doses it does not exercise a deleterious effect, either on the digestive organs or on the cerebro-spinal system. It can be used for some time without an interruption being necessary. When digitalis is used in the necessary intervals of administering it, spartein sulphate may be used with advantage. In cardiac affections accompanied with dropsy, an infusion of broom-flowers added to the spartein sulphate has a beneficial effect, acting as a diuetic. In cardiac dyspnœa, iodide of potassium may be used, as well as spartein sulphate; and pyridin inhalation should also be administered.

THE ABUSE OF OPIATES TO RELIEVE THE COUGH OF PHTHISIS.—*Apropos* of DR. BROADBENT'S recent paper on The Remote Effects of Remedies, an abstract of which has already appeared in the AGE, DR. J. MILNER FOTHERGILL writes to the British Medical Journal as follows:

No one can peruse the able address delivered by DR. BROADBENT before the Section of Medicine, at Brighton, without being powerfully impressed by it. The remote effects of what purchases "present ease," is a matter far too little regarded in medicine. What the patient wants is to get relief from pain, or some other immediate trouble. The future lies beyond the sphere of his vision, and, when pointed out, is not always particularly acceptable to him. A marked instance came before me recently, in the person of a gouty man. On my pointing out to him the evils which lay before him, he listened patiently and politely, and then remarked: "It is very kind of you, doctor, to be so thoughtful about my future; but I am thinking more of my present." And, no doubt, he was spokesman for a large class of patients. They do not care to look beyond the immediate present, or to subordinate it for the future; nor do they give their medical men any encouragement to look to the remote consequences of the remedial agents employed, provided they act immediately.

DR. BROADBENT has handled the subject with consummate ability; but one matter there is to which he has not alluded—doubtless on the score of time—which is so important, and of such everyday occurrence, that it seems to me well to allude to it now, when DR. BROADBENT has drawn attention to the above topic. It is the use of opiates to relieve cough. When the poor, worn, emaciated consumptive is racked with cough, which almost shakes the frame to pieces, it would be cruelty to withhold the welcome soothing cough linctus. But it is a very different matter to give opium or morphine to allay a cough which is little more than troublesome. To sip a cough linctus at frequent intervals, or to take a cough lozenge from time to time during the day, is often a most pernicious practice. The sedative carries with it its all-round action, and the liver and digestive organs feel its paralysing influence.

So much harm have I seen done by the poisonous cough linctus, that it is banned in my wards at Victoria Park Hospital; with only one exception, namely, when the case is hopeless. But so long as there is a prospect of life, I never throw the chance away, nor blot it out by handicapping the assimilative organs by the crippling effect of continuous sedatives. My rule may be too hard and fast in the opinions of some others who act differently, but it gives good results. When the cough prevents sleep, a narcotic at bedtime may be indicated; but this is far less objectionable, possibly as the digestive organs are resting at that time; and it is possible, too, to counteract any evil effect by adding an agent like aloes, which is an hepatic stimulant, as well as acting on the bowels. But opiates during the day are a slow poison in cases where the great aim is to improve the nutrition.

The old adage, "to strike when the iron is hot," must be my apology for trespassing upon your space at this time.

A NEW EMMENAGOGUE, OXALIC ACID. — Formerly, in making a choice among the agents furnished by the materia medica of an emmenagogue, it was considered that the absence of the menses was due to a congestion or inflammation of the uterus; so that rue, savin, etc., were tried, as they were considered to possess some sort of dynamic action that would calm the congestion of the organ; or else it was supposed that the blood by some means had become altered and had been prevented from taking its habitual course; so drugs like saffron were tried, without much better results. Later

it was discovered that the menstrual hæmorrhage is nothing more than the consequence of ovulation, and there was a revulsion in therapeutical ideas, as the physiological basis had been entirely false.

Suppression of the menstrual flux can be caused by the opposite causes of insufficiency and plethora, action of cold, climate, habit, food, etc., but oxalic acid would seem, from the numerous clinical cases given by DR. F. POULET, to act in almost all of the various sorts of amenorrhœa.

It was reported that this agent acts equally well in almost all cases of catamenial difficulty where there may exist a febrile reaction with consecutive inflammation of other organs, and also when there is a hæmorrhage, or where there is a suppression caused by a cold, which last is so common. Apiol is one of the few sure remedies left to us in amenorrhœa, but it can be used to advantage only when the suppression depends on some nervous cause; but oxalic acid, by the multitude of its applications, suits all cases. Attention is called also by this author to the fact that there exists an antagonism between the action of cinchona and its salts and oxalic acid. He declares that just as much as oxalic acid favors and provokes the menstrual flow, so does quinine prevent it. So that the last should be a good remedy for metrorrhagia; and, indeed, DR. POULET and those with him consider quinine much superior to ergot in such cases; there is therefore great danger in giving cinchona preparations to women without considering the menstrual period. Oxalic acid has always been considered a very dangerous poison; but it seems to be one of our physiological proximate principles, since in the normal state it is found in the intestinal juice in considerable quantity, and it is now being studied in animals by PROFESSORS ARMAND GAUTHIER and MATHIAS DUVAL. It probably plays an important role in intestinal digestion. The following formula has been used as an emmenagogue:

℞ Acid. oxalic. 2 grms.
Aquæ ferventis, 200 grms.
Syr. aurantii corticis amaræ, 60 grms.
M. Sig. Teaspoonful every hour.

In one case the whole of the above was given before the effect was produced; in other cases the menses came on before one-third had been taken.—*Phila. Med. Times.*

SHOULD POULTICES EVER BE USED AFTER AN ABSCESS OR WHITLOW HAS BEEN OPENED, OR TO AID THE SEPARATION OF SLOUGHS?—Our reply to the above question is a most emphatic negative. Before an abscess or whitlow has reached the stage when either the patient consents to incision, or the surgeon is willing to lay it open, undoubtedly poultices serve a useful purpose. We are willing to go further, and admit that the case of a felon, where sloughs have to be separated, or in a wound where the same process had to be gone through with, poultices will hasten the separation of dead tissue, but—and this is a most important "but"—will the whole duration of the case be lessened, and will the minimum of danger result? Most assuredly not. We cannot help thinking, for scientific reasons, that the vulgar belief has some truth in it, that prolonged poulticing causes death of the bone in some cases of whitlow. Let any unprejudiced surgeon compare the appearances presented by a poulticed felon, and one treated after the method I advocate, and I feel convinced that half my position will be readily conceded.

My preference for a whitlow is free incision, soaking in a mercuric bichloride solution, dusting freely with iodoform, and dressing with absorbent cotton impregnated with the same drug. This usually need only be removed on the third day after, unless pain and tension be complained of. For an abscess, free incision, with counter-incision, if necessary, at the most dependent portion, the introduction through both orifices of a large drainage-tube, the thorough and repeated syringing out of the cavity with mercuric bichloride solution, and the same iodoform and cotton. For a contused and therefore a future sloughing wound, antiseptic irrigation should be used, with appropriate incision, if there seems to be much risk of inflammatory swelling; if not, merely iodoform and cotton.

To what cases can this method be applied? To all such as warrant conservative treatment.

Those who follow my advice will at first be disappointed by the primary tardiness of the cure. The sloughs separate only very slowly. But what matters it, if there be next to no pain, fever, or suppuration? So long as the wound is aseptic your patient is safe; and when the slough does separate, instead of macerated, soggy, œdematous tissues slow to take on healthy action, you will have a healthy wound which rapidly cicatrizes. Your patient will not be emaciated, have been unable to eat, with a coated tongue, and a disordered gastro-intestinal tract—quite the reverse.—C. B. NANCREDE, M. D., in *Polyclinic.*

TREATMENT OF WHITLOW AND SPRAINS.—DR. JOHN CHIENE, in his contributions to practical surgery (Edinburgh Medical Journal), writes as follows on the treatment of whitlow and sprains:

In deep-seated digital inflammations over the first and second phalanges, the cause is either an inflammation of the flexor sheath, or periosteal in origin. In inflammations over the anterior aspect of the terminal phalanx, the cause is periosteal, and the worst that can happen is necrosis of the terminal phalanx.

In all cases make your incision early, central, and in the long axis of the finger. Relieve tension, and prevent spread of the inflammation from the flexor sheath on the finger to the common flexor sheath on the anterior aspect of the wrist. In periosteal cases early incisions prevent necrosis of the affected phalanx. Whitlows are infective conditions, and are due to a colony of micrococci. The periosteal whitlows are cases of acute suppurative periostitis.

The infective character of these conditions must not mislead the surgeon into supposing that careful antiseptic precautions are unnecessary. Sepsis and infection are perfectly distinct conditions. Relieve the tension, and the evil effects of the pathogenic micrococci will soon subside; prevent sepsis caused by the en-

trance of septic organisms from the external air, and rapid healing will be the result. In patients who are liable to whitlows, as in people who suffer from boils and carbuncles, administer corrosive sublimate internally; it is a most powerful anti-fermentative.

In sprains, carefully applied elastic pressure, with wadding, combined with massage and passive movement, gives the best results.

In diagnosticating an injury, look before you touch a limb. Remember the normal relations of the styloid processes in diagnosticating injuries in the region of the wrist; the relation of the head of the radius to the external condyle of the humerus in the elbow-joint; and let the coracoid process and its relation to the head of the humerus be the principal guiding landmark in injuries of the region of the shoulder.

Always expose the uninjured corresponding region, examine it in the first instance, and let it be your standard (having satisfied yourself that it is normal) in diagnosticating the injury on the opposite side.

Intra-pulmonary Injections of Carbolized Iodine in Phthisis.—Dr. John Blake White, physician to Charity Hospital (Med. Record), reports eleven cases treated by this method, and the benefit which followed prompts him to make the following assuring remarks. To patients afflicted with this justly-dreaded affection the intra-pulmonary treatment opens up new hope, and, I think, with good reason. The plan of treatment enables the physician no longer to stand with folded arms awaiting for his patient the inevitable end, but puts in his hands the means of prolonging, and sometimes of saving, life.

The following formula is the one which I have been using, and which seemed to occasion the least amount of irritability when injected:

℞ Atropine, gr. $\frac{1}{3}$.
Morph. sulph., gr. ij.
Tinct. iodine, ʒ iij.
Acid. carbol. (pure), gtt. xx.
Glycerin, ʒ iss.
Diluted alcohol, 20 to 30 per cent., ʒ iss.
M. Sig. 15 to 30 minims.

The prescribed quantity was introduced into the pulmonary excavations by means of a hypodermic syringe, the needle of which was plunged through the intercostal spaces. The injections were administered at intervals varying in length from twelve days to three weeks.

The Physiologial Action of Menthol.—Dr. Goldscheider, at a meeting on April 9th of the Physiological Society of Berlin, discussed the action of menthol on the sensory nerves. It was well known that it produced on the skin a sensation of cold, which was commonly ascribed to evaporation. On the other hand, the same sensation when produced in the mouth by solutions containing menthol or peppermint, was explained by a supposed astringent effect. Dr. Goldscheider had come to the conclusion that neither of these explanations was correct. He made his experiments with a solution of menthol in lanolin, which he rubbed into circumscribed regions of the skin. After the rubbing the thermometer showed in all such places an increase in temperature to the extent 2° C., notwithstanding the marked sense of cold produced. The hypothesis of evaporation was excluded by the fact that the feeling of cold was no less marked when the part rubbed was covered with a watch glass, and could, therefore, be produced only by direct stimulation of the nerves of the sensation of cold. Again, if two corresponding places on the forehead where these nerves are most abundant, one were rubbed with the menthol ointment and the other not, bodies which previously had caused no particular sensation would be felt as cold on the former spot but not on the latter. Dr. Goldscheider observing that while some regions, as the forehead, were especially sensitive to cold, others, as the elbow and the volar side of the wrist, were so to heat, found that the inunction of these with menthol produced a sensation of warmth, though less striking than that of cold in the former regions; and he called attention to the recent communication of Professor Herzen, on the precisely analogous results of pressure on the nerve trunks in these regions respectively. He therefore concluded that the sensations, in some places of cold and in other places of heat, produced by menthol, were purely subjective and consequent on the direct stimulation of the special nerves of temperature, those being cognizant of cold being far more sensitive to its influence than were those adapted to receive impressions of higher temperature.—*British Med. Jour.*

Frogs' Skin as Grafts, Used in the London Hospital.—Sometimes slowly healing wounds with feeble granulations are made to increase their activity in the direction of cicatrization by transplanting minute fragments of epidermal tissue containing some of the cells of the rete Malpighii on the healing surface. O. Petersen has successfully used the skin from the back of a frog. The slowly cicatrizing wound was situate on the back of the neck of a man and had resulted from excision of a malignant pustule. A piece of frog's skin the size of the thumb-nail was washed in a two-per-cent. solution and placed upon blotting-paper, when it was divided into two. The grafts were applied to the wound so that the blotting-paper was interposed between them and the fixing plaster. Two days after the transplantation both fragments of epidermis were found to be adherent. Two days later a fresh grafting was made; the former grafts had become roseate. In a further period of forty-eight hours the pigmentation of the grafts had almost disappeared. The cicatrix resulting from this treatment was found to be of great softness and elasticity. Frog's skin as grafts has been recently employed at some of the London hospitals.—*London Lancet.*

Grey-Powder a Specific in Infantile Cholera.—Archibald Macdonald, M. D., in the Brit. Med. Jour., Aug. 21, 1886, thus emphatically states his views regarding the treatment of infantile cholera:

There is no greater certainty in therapeutics

than that "infantile cholera"—profuse watery diarrhœa—will be cured if treated within the first few hours by one-sixth of a grain of grey-powder given hourly even by itself. But I give usually one-sixth of a grain of hydrargyrum cum cretâ, with two grains of lactopeptine; and in some cases I administer as another *adjuvans* a vegetable astringent, such as krameria. Again, when the stools are slimy with, it may be, blood-streaks, I give liquor hydrargyri perchloridi, 2½ drachms in 2 ounces of water, of which a teaspoonful given every hour meets the case.

The diet should be cold, consisting of arrow-root made with water, and very slightly sweetened; barley or rice water to drink. One case which was baffling the grey-powder was explained by the presence of a piece of undigested beef on a napkin. Maternal ideas of feeding have sometimes to be sharply enlightened.

Treatment of Somnambulism.—It is not often that we find somnambulism treated of in medical journals, but we can readily conceive how this condition will, not infrequently, call for relief from the physician. Dr. J. W. Keene has a good article on the subject in the Medical Press of Western New York for August, wherein, speaking of treatment, he says that there is little to be said, except that somnambulism should be recognized as a disease, or, at least, a symptom of disease, and treaten according to causation, when that can be ascertained. Efforts to break up the habit should be made. Punishment, drenching with water, etc., are contraindicated. Dr. Hammond extols the bromide of potassium. Iron, quinine, and strychnine, and phosphorus may be exhibited with advantage, according to special indications. These remedies, together with proper hygiene, both physical and mental, seldom fail to benefit the patient, if not to effect a cure.

Saccharin.—Saccharin, the new coal-tar derivative which is sweeter than sugar and is yet neither a food nor a poison to man, so that it may be used by diabetics for sweetening dishes, is, in its chemical constitution, an acid; it is anhydrous orthosulphaminbenzoic acid. As it has so ponderous a name by nature, the discoverer and manufacturers, who by the way are very dilatory in putting the new drug on the market, did wisely to give it a short and simple trade name. It is well, however, to remember that the substance has an acid constitution; for, as Dr. L. Wolff has pointed out in a paper read at the Philadelphia County Medical Society, it can be used to combine with alkaloids; with quinine, for instance, it forms a sulphaminbenzoate of quinine, the bitter taste of the alkaloid being almost completely masked.

Œnanthe Crocata.—This is one of the few new remedies that has gained for itself a position of much importance in the treatment of epilepsy. I have treated several cases with this drug, and in every instance the spasms have ceased. In one case the medicine was discontinued after being used six months, and a light spasm came on in a few weeks. She again began its use with no re-appearance.

Many cures have been reported to me from œnanthe as given by my directions, while others report that it produced such annoying headaches that its use had to be abandoned. This headache was due to the drug being given in too large doses, and when such symptoms arise the dose should be reduced.

There are other diseases in which, from a theoretical point of view, œnanthe would be specifically indicated: such as arise from malnutrition or anæmia of the brain and spinal cord. Time is needed, however, for further development.—*Exchange.*

Caffeine as a Diuretic.—The result of Von Schroeder's experimentation has shown that caffeine exercises a strong, energetic influence upon the renal secretion, and that this effect is due to a direct stimulation of the secretory elements, the epithelia of the kidney. Immanuel Munk coincides with this fully, as will be remembered, and now comes further corroborative evidence in the Centralblatt fuer die Medicinischen Wissenschaften, July 17, 1886, from Dr. A. Langaard, of Berlin. He also studied diuresis by catching the secretion by means of glass tubes inserted into the ureters. Chloral hydrate was given to effect paralysis of the vaso-motor centre. The result is formulated to the sense that caffeine is a true diuretic; that the increase of urine secretion occurs, independent of the blood circulation, by direct action upon the secretory elements.—*Exchange.*

Turpentine Vapor as a Remedy for Diphtheria.—Out of sixty-three cases of diphtheria treated by impregnating the air of the patient's room with the vapor of turpentine, from sponges wetted with the turpentine, M. Detthill, a Parisian practitioner, claims to have cured sixty patients.—*Medical Press and Circular.*

Ustilago Maidis.—In congestion of the nerve centres in many cases, ustilago maidis will be found to be superior to ergot. It produces the same results as ergot, and in addition it produces the calmative effects of bromide of potassium. It would thus seem to be especially indicated in many cases of cerebral hyperæmia. —*Chicago Medical Times.*

Cascara Sagrada in Dyspepsia.—Dr. Tschelzon (Centrlbl. f. die gesammte Therap.) finds that cascara sagrada causes an increased secretion of gastric juice, bile, and pancreatic juice, and hence is useful in most forms of dyspepsia.

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Original Articles.

REPORT OF EIGHT CASES OF FRACTURE OF THE SPINE.*

BY H. O. WALKER, M. D., DETROIT, MICH.

Case 1.—CHAS. GROTH, a native of Germany, while wrestling in a saloon on the evening of December 24, 1875, was thrown over the head of his opponent, striking the floor with his neck and shoulders. The position of the two men was back to back, with their arms interlocked, each striving to throw the other so as to cause him to turn a somersault and land on his feet; this was only partially accomplished by GROTH'S opponent, causing him to strike the floor as just mentioned.

G. was 27 years of age, five feet ten inches in height, weighing nearly 200 pounds. Little or nothing was done for him for three days, when he was brought to St. Luke's Hospital, December 27th, presenting the following symptoms: Pulse 72, full and strong; respiration 36 and short, the diaphragm alone working; temperature 100°; skin dry; pupils contracted; tongue large and flabby. There was some swelling at, and pain on pressure over the spinous process of the sixth cervical vertebra. The patient could move both arms a little, but could not flex the elbows or fingers, with entire paralysis of the body below the 2d rib. The abdomen was greatly distended, and three quarts of urine was drawn from his bladder immediately after admittance to the hospital, the first that had passed since the accident. He was very restless, and complained of severe pain in the back of the head at each respiration; talked very little, but gave intelligent answers to all questions. Patient was very thirsty, but anorexia was complete. Immediately after the injury, the man was delirious, and priapism existed. He could not then move his arms. When the soles of his feet were pricked reflex movements of the toes took place, the patient being unconscious that his feet were touched. On the morning of the 28th he could not move the arms at all, and never regained motion. It was necessary to use the catheter frequently during the time the patient lived. His bowels were emptied by means of an enema which was drawn off through a rectal catheter. Flatus was removed by the same means. A bed-sore appeared over the sacrum the third day after the patient was admitted. He was supported by beef tea, egg-nog, and milk, which were given from a feeding bottle. He was delirious occasionally. He became comatose at 11:00 p. m. December the 30th, and died at 6:00 a. m. December the 31st. His temperature at the time of his death was 108½°. For several hours before his death hiccough was almost uncontrollable, being checked in part by large doses of chloral hydrate. The right side of the diaphragm alone carried on respiration, for some time before death. An examination was made eight hours after death, the sixth cervical vertebra was dislocated and forced over towards the left, the tip of the spinous process broken off, and also a portion of the upper and posterior part of the body of the seventh. That extravasation of blood had occurred was shown by a clot found between the vertebra. The medulla spinalis was much softened, almost flowing through a cut made in the membrane. The brain was slightly congested.

Case 2.—MR. O., aged 63, of Port Austin, Mich., came under observation May 26, 1883, through the kindness of DR. RICHARDS.

MR. O., while riding his horse, was thrown backwards, striking upon his head, the horse rolling over him. He was picked up with complete paralysis below the clavicles, anteriorly and posteriorly below the articulation of the third and fourth vertebræ. The accident occurred three days before I saw him. At that time his breathing was labored, and abdominal, temperature averaging about 102°. There was entire loss of motion and sensation below the points above mentioned. The urine had to be drawn with the catheter. As near as could be made out, the fracture occurred in the fifth cervical vertebra. He lived three weeks. No attempt at reduction was made, as there did not appear to be any displacement. Treatment consisted in absolute rest of the neck, with anodynes and such other remedies as seemed indicated. He lived three weeks after the accident. No post-mortem was made.

Case 3.—J. B., aged 29, while intoxicated, fell down stairs, and was taken up with paralysis below the axillæ. I did not see him until the day he died, the accident having occurred three days previous. At that time he was comatose, and with a temperature of 105½°.

* Read before the Detroit Medical and Library Association, Sept. 7, 1886.

The next day I made the autopsy, and found entire separation of the sixth cervical vertebra from articulation with the vertebra above and below, together with a fracture of arch. The cord was torn through its continuity, with considerable extravasation of blood in the canal at the right of injury.

Case 4.—W. M., farmer, aged 35, of Oakland, was returning from Rochester, and while standing up in the wagon, the horses started suddenly, and he fell, and was taken up with complete paralysis below the clavicles. I saw him the next day, August 28, 1884, in consultation with Dr. J. E. Wilson, of Rochester. Examination revealed quite a prominence at the junction of the fourth and fifth cervical vertebræ. We attempted reduction by extension and counter-extension, but only partially succeeded. The manipulation determined the fact that a fracture existed in the fifth cervical vertebra. He lived forty-eight hours. No post mortem examination.

Case 5.—Joe B., aged 38, while intoxicated and sitting on the Wabash railroad track, was struck by an engine, Oct. 23, 1884. He was taken to Harper Hospital, and on examination I detected fractures of the spinal processes of the eighth and ninth dorsal vertebræ. Partial paralysis of the lower extremities existed for a few days, necessitating the withdrawal of his urine with a catheter. The treatment consisted in keeping him upon his back with several thicknesses of sheet wadding on each side of the spinous processes. He left the hospital in about six weeks able to walk with the aid of crutches. I saw him several months afterwards, when he had made a complete recovery.

Case 6—Wm. Smith, sailor, aged 35, entered entered Harper hospital Nov. 15, 1885, with complete paralysis of the lower extremities below the eighth dorsal vertebra. He stated that this morning while assisting to unload the barge Oconto the elevator fell and struck him upon the back when stooping, crushing him to the floor.

Examination revealed quite a prominence of the eighth dorsal vertebra. With the assistance of Drs. Wean and Biddle, of the House staff, I succeeded in relieving the prominence partially, but on removing extension the deformity was as prominent as before. I did not deem it advisable to keep up the extension for the reason that it was excessively painful to the patient and did not, while kept up, prove of any benefit. The urine had to be drawn with a catheter and cystitis followed in a few days together with bed sores over the sacrum and each external maleoli. I followed treatment as in previous cases with pad on each side of vertebræ. Temperature ranged from normal to 104° until his death, which occurred May 24th, 1886.

The following day I made a post mortem examination. The body was very much emaciated, with entire sloughing of the soft parts over lumbar vertebræ and sacrum. I removed several of the vertebræ, including the eighth dorsal, the seat of fracture and displacement.

Fig. 1.

It will be observed in the engraving taken from a photograph by Dr. Wm. R. Murdie, that the anterior upper fourth of the body is broken off. The cord was considerably softened above and below, and entirely obliterated at the point of injury. The union between the fragments is fibrous.

Case 7.—D. L., aged 37, a janitor of one of the public schools, while cleaning windows, fell from the second story. I saw him two hours afterwards, April 19, 1886, at St. Mary's Hospital. His injuries consisted of Colles' fracture of left radius, together with a marked prominence of the eleventh and twelfth dorsal vertebræ. I succeeded in partially reducing the deformity. Paralysis was complete below the seat of injury. His urine had to be drawn, and a severe cystitis set in on the third day after the accident. Bowels only moved by means of copious injections. Temperature ranged from 101° to 103° up to the time of his death, which occurred April 30th. The treatment consisted in lateral pressure with pads. I first put him upon his abdomen, but the pain was so severe that he had to be turned upon his back. No post mortem made.

Case 8.—F. W., teamster, aged 32, while fixing the binder to a load of lumber, it gave way and he fell, his head striking the pavement. This occurred at 2 p. m., April 16, 1886, when he was immediately brought to St. Mary's Hospital, when I saw him. He presented a severe scalp wound, extending from just above the left orbit to the occiput. There was no

bleeding from either the ears, nose, or mouth. He was paralysed completely below the fourth cervical vertebra. Although no deformity of the spine existed, I diagnosed it as a fracture of the fifth or sixth cervical vertebra. I could not make out that there was any fracture of the skull. He was conscious, and intelligently described how the accidentoccurred. At 5 p. m. he lapsed into semi-comatose condition, and died at 2 a. m., April 17, 1886, twelve hours after the accident. I made a post mortem examination at 11 a. m., the same day. On removal of the calvarium, a fracture was discovered extending from the left parietal eminence, forwards and downwards through the anterior part of the squamous portion of the temporal bone, thence inwards through great wing of the sphenoid, ending at the anterior clinoid process. The brain was congested, but no evidence of clot was manifest anywhere, either within or without the dura mater.

The arch of the fifth cervical vertebra was broken off at both sides at the junction with the body.

Fractures of the spine, are fortunately, rare, only occurring in the ratio of about one to three hundred. The spine possesses, aside from its function of support to the head and trunk, also the protection of the spinal cord and nerve trunks. It can, then, be readily seen that a fracture of the body, arch or processes of a vertebra, is quite liable to cause instant death, or, what is worse, a lingering death, namely, paralysis below the point of injury, or, to a less degree, limited paralysis. The prognosis is always bad where there has been any injury to the spinal cord. The measures for treatment can be rarely attained as in other fractures. Immobilization should be resorted to in the best manner possible, either by pads, sand-bags, or plaster-of-Paris. Operative treatment has rarely been successful. It is my opinion that any treatment in such cases as I have reported (with one exception) will be useless, and all we can hope to do is to make our patient as comfortable as possible.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, Sept. 6, 1886.

E. J. DOERING, M. D., President, in the chair.

Dr. J. S. JEWELL gave a partial verbal abstract of his paper on

OVERFILLING AND DILATATION OF THE COLON.

He said that for the last ten years this subject had attracted more or less attention. During the last eight or ten years he had accumulated a list of over 500 carefully-studied cases, in which the condition named existed and concerning which he gave his observations. His mode of investigating the cases in which the overfilling existed has been as follows: The patient is stripped so that the abdomen is bare, the abdominal walls being relaxed. Then he takes a plate of soft rubber at least two inches in length by an inch and a half in breadth and one quarter of an inch in thickness, and a heavy steel hammer, quite as heavy as the ordinary surgical bone hammer. With this the the abdomen is carefully percussed over the track of the colon, from its origin tracing it up under the liver, across and down to the sigmoid flexure. Thus percussing over the track of the colon and carefully locating every mass of fæces (even in persons with fleshy abdominal walls), he has been able to get at its course and contents. Out of these 500 cases, perhaps 100 have said that they were as "regular as clockwork" in having movements from the bowels. But upon examination, in most such cases the colon was found to have variable quantities of fæcal material lying in it. The part of the colon most subject to dilatation is the sigmoid flexure and the descending colon. At the flexure of the colon, deep in the left hypochondriac region, almost as frequent as in any other part of the course of the colon, he had found it dilated and filled with fæcal matter. The next most common situation is the transverse colon; last of all the cæcum. In one case where the colon was very largely dilated, during the 30 or 40 hours that were devoted to emptying the same (not continuously but at different times) two gallons or more of material were removed. The common way is to find masses of fæces lying in lumps here and there, not filling the entire intestine.

In one case a mass was removed from the right extremity of the colon by massage, and flooding the colon its entire length with water. The fact that this mass had remained in the colon for more than nine months was ascertained in this way: The patient had taken a dish of dewberries, such as appear in the fall after the ordinary blackberry has passed its season. He was in ill health, and growing worse during his visit returned home. This was in September. DR. JEWELL saw him early in June following. When the mass was removed it was found to be more or less filled with the seeds of the dewberry, and according to his own account he had not taken berries of any kind since the September previous, certainly no dewberries. This mass was about the consistence of soft putty and the size of a large Irish potato.

In most cases investigated the colon was dilated apparently, in some part or other, all the way from two to three times its proper calibre. This class of patients are all liable to become "bilious" and are habitually taking cathartic pills, mineral waters, etc. In every or nearly

all instances, Dr. Jewell could trace their "biliousness" to gradual filling up of the colon, and the disturbance produced from this cause in the digestive apparatus higher up. The change in the secretions of the mouth, the bad breath, the unhealthy odor of the skin produced by absorption of fœtid substances from the rotting masses in the intestine, together with the coloring matter in the same, gives the skin of the patient a peculiar, dirty sallow color. One of the first things to occur in addition to the dilatation, and weakening of the muscular coat of the colon by accumulation of material in it, is irritation of portions of the mucous membranes where the fæcal masses lie, producing local catarrhs. This occurs with a frequency and to an extent that no one would suspect, unless they set the patient or nurse to carefully watching the stools. The next important factor in these cases is irritation of the peripheral ends of the sensory nerves of the intestinal mucous membrane, irritated by contact with the fæcal masses. The nerves that return from the colon probably enter the spinal cord, at a level not lower than that of the tenth or eleventh dorsal vertebræ. Above the level named they probably enter the cord at various points higher up in the lower two-thirds of the dorsal cord, not to mention direct medulla connections, etc. Along these nerves are propagated the irritative impressions from the colon into the spinal cord or medulla, and thereby "switch" connections, outgoing or reflex impulses, are sent to other portions of the body, producing thus various forms of disorder to be referred to later. He believes that he has not found one case in twenty of ordinary melancholia that has not had its origin partly or in some cases apparently entirely in overfilling of the colon. Headache and a great many transient disorders referred to the head more frequently, owe their origin to this source than he had ever supposed. Next is the influence upon the circulation in general, especially upon the heart's action, lowering its tension, and thus giving a feeble pulse.

Dilatation of the colon often causes a sluggish capillary circulation, and this accounts for the frequency with which patients complain of cold extremities. Dr. Jewell has found patients who could not remember having had naturally warm feet for years, when upon removal of the masses in the colon the feet would become warm. In insomnia he has found the condition of the colon described to be a frequent cause, the colon being the seat of the original disorder. There is lowering of the vascular tension nearly always in these cases; hence the feeble nutrition and feeble circulation in the brain, not to mention other parts. The next most important result of dilatation and overfilling of the colon is the fact that these masses of retained fæcal substance in various ways poison the individual, by absorption of septic material. He has had three cases of epilepsy that he traced exclusively, as far as could be told by the results of treatment afterwards, to disease in the left extremity of the colon caused by fæcal accumulations, and when the disorder was removed by proper means he was able to relieve the epilepsy. For the removal of these masses, as a rule, he does not use purgatives, but injections are given after the following plan: A large bag fountain syringe, holding half a gallon, is adjusted at-a convenient height from the floor, the patient lying down in the knee-chest position. The fluid should flow with considerable force until it makes its way past the upper sphincter which is at a lower part of the sigmoid flexure; pass one quart to one-half gallon of water, according to the size of the colon, so as to fill the entire organ to the cæcum. In some instances he has been able to introduce as much as a gallon of water into the colon, the patient feeling no serious inconvenience from it, and a half gallon is a common amount to introduce. The patient is then then directed to lie down on the left side, and by a proper massage over the ascending colon the liquid is moved with the contents of the bowel, toward the rectum. This should be done once or twice in the 24 hours until the colon is clear, and by this means it should be kept so. After this has been accomplished give the patient something that will act as a stimulant to the nervo-muscular coat of the colon. A good prescription for this purpose he has found should contain in pill or capsule form extract of cascara, a little belladonna, strychnia, hydrastis canadensis and aloes. By care the colon can be kept clear, and the disorders of the stomach usually disappear, the the secretions of the mouth are improved, the skin becomes a healthier color and loses the distinctly fæcal odor that it frequently has.

He has met with a number of cases of so-called typho-malarial fever in their earlier stage with a temperature as high at times as 103–4–5, in which, by removing a great mass of material undergoing rapid fermentative decomposition at the high heat of the body, leading to rapid distension of the colon with gas, the signs of disease abated in a few hours, and rapid recovery occurred. Where there is considerable inflammation in the bowel itself he introduces water pretty well charged with listerine, or some other antiseptic, and a little glycerin or other medicinal agents, and in this way the intestine is purified and cleansed, and the individual immediately improved. It seems now astonishing that it never occurred to him earlier, that to have a mass of fæces undergoing fermentation and decomposition in the interior of the body, and in contact with an absorbent surface like the colon mucous mem

branes is or may be often the real cause of serious disease.

Dr. H. H. Johnson, in opening the discussion, said: This is a subject to which I have given no special attention, but perhaps if I propose one or two questions it may elicit some information. First, the inquiry suggests itself to me, as to why this state of things exists; what is the cause of it? Perhaps, as the author has suggested, our rapid mode of eating, and our neglect of the natural demands of the functions of digestion have something to do with it, but this does not seem to me to cover it all. Secondly, the question arises in my mind as to how far such a state of things as he describes actually exist in the colon, viz., putrefaction of the contents. So far as my observation goes, the contents of the cavities of the body, including the alimentary canal and bladder, are kept from undergoing these putrefactive changes while they are enclosed. It is true that the fæcal matters are full of bacteria in various forms, but I am not sure that the ordinary processes that take place out of the body, go on here. Thirdly, as to the function of the colon; it is both an excretory and secretory organ, and nutritive matters that are carried into it are undoubtedly taken up in their passage through it. There should be a delay, a normal arrest of the progress of the fæcal mass from the time it enters the colon at the cæcum till its discharge. In the normal condition the fæcal mass is made up of the debris, of the waste matters of the food, and the material removed from the blood; there ought to be, physiologically, a retardation—time for the accomplishment of these two functions. What is that time?

Dr. Wm. E. Clark said: The subject before us is one of great importance, and one to which I have given much thought. My first call in consultation, after my return to the city some twenty years ago, was to a female patient who had been an invalid for a number of years. A tumor could be felt through the abdominal walls, supposed by the attending physician to be a tubercular enlargement of the mesenteric glands, but which proved to be a mass of fæcal matter in the colon. It had probably been accumulating for a long time, as after removal it was found largely to consist of bran from Graham bread—her principal diet for several years previous. Under appropriate treatment, with particular attention to the condition of her bowels, the patient apparently recovered her health, though she died some years after with disease of the kidneys—the latter, perhaps, having some relation to the previous condition of the bowels.

Again, to-day I made an examination of a supposed uterine tumor, and found a tumor, but not connected with the uterus—but an accumulation of fæcal matter in the colon, and, consequently, have made arrangements for its evacuation. For the removal of these masses of fæcal matter, I first give cathartic with large doses of olive oil, and then use injections of water into the bowel as far up as possible through a stomach tube; sometimes resorting to the placental forceps for the removal of large fragments.

Dr. G. C. Paoli said: I have listened with a great deal of interest to my learned friend tonight. We know that expansion of the colon occurs in many different diseases, and there is hardly a practitioner who has not seen it in his practice for years. We see it in typhoid fever, nephritis, hysteria, and lead colic. Constipation is undoubtedly a great cause of expansion of the colon. A man gets constipated, neglects himself, his fæces becomes very hard, and in consequence, pains occur in the colon. With due respect to the author's experience and observation, he must admit that although we meet with cases in our practice, they are not so common that we see them in the hospital. In regard to the treatment, we ought to administer such remedies as will give tonicity to the muscular coat of the bowels, such as cascara sagrada in combination with small doses of aloes. But without physical exercise medicine has very little beneficial effect. I have seen a shower bath over the abdomen have a good effect in producing contraction and tonicity of the muscular coat of the bowels. In regard to the injection which the author advises, it is well to remark that the rectum should first have a digital examination, because often hard excrement is impacted in it, and under such circumstances the injection would meet with an obstacle. Strychnine may be very good in chronic, but not in acute cases.

Dr. Jewell, in closing the discussion, said: The members of the society will, of course, understand that I have spoken only of the sick people who have come to me, a special class that is not met with so frequently in general practice. I am speaking entirely within bounds when I say that the number of cases that I now have on my record in which over-filling of the colon was one of the principal features of disorder, must be 700 or 800 during the last ten years, and 500 of these have been made the basis of my study. The question as to how long the matter may be left in the large intestine without harm, is to me exceedingly interesting, and I have made that a study. The difference between the ordinary slow decomposition of fæcal matter in the intestine, and unhealthy decomposition, I have taken into account in my study, as well as the conditions or causes that bring about unhealthy decomposition. I am convinced that not enough stress is laid upon this subject. Many persons in the condition I have referred to have been all but ruined by taking by the week, month and

year, cathartics, which must have been taken into the stomach first, dissolved and go the entire length of the intestine before they reach the colon. The colon may be emptied in a much more satisfactory way by means of large injections, together with the use of mechanical agents, to stimulate naturally its weakened muscular apparatus.

DR. A. SCHIRMER reported a case of

ACTINOMYCOSIS HOMINIS,

with exhibition of patient and specimens of actinomycosis.

FRANK P., a Pole, 25 years old, married, laborer in a lumberyard, has been five years in this country. No hereditary disease in his family. His occupation in the old country was farming during the summer months, and during the winter months he attended to barnwork. He never was sick, and never had the toothache. In his 18th year, while chopping wood, he received an injury on the chin, which produced a bleeding wound. No medical attendance was necessary at the time. Shortly afterwards he noticed a swelling on both sides of the lower jaw. The swelling of the right side disappeared in a few days, but that of the left side remained three months after the injury. He was obliged, on account of pains, to consult a physician, who injected at different times a clear fluid into the swelling. These injections were very painful. Shortly after the injections the skin turned white, and in the course of a few days it broke open and discharged a little pus. Later on the discharge of pus increased, the fistula remaining open. After that time the patient was not able to fully open his mouth. Three years ago, on account of a severe cough, he was unable to work for one week. From that time on he was able to work until last May, when on account of weakness, pains and stiffness in the neck, he was obliged again to quit working. At the end of July DR. SCHIRMER saw him at his house. He complained of severe pains in the left side, and stiffness of the neck, being unable to move his head. He was feverish, pulse and temperature increased. He also had some cough; no appetite. Two days afterwards the opening of the fistula was enlarged and several small pieces of necrosed bones extracted. At the same time DR. SCHIRMER opened an abscess situated between the jaw and the shoulder on the left side which discharged about one tablespoonful of a thin, serum-like pus, in which were sand-like granules of a greyish-yellow color. The opening was enlarged, and by digital examination and with the sound, it was found that the crown of the abscess had no connection with the surrounding tissues. The abscess was superficial and did not extend into the deep layers. After this operation the patient could open his mouth better; ten days afterwards another abscess was opened on the right side of the neck. It discharged almost four tablespoonfuls of pus. The pus was thicker and the granules were considerably smaller that in the abscess of the left side. The skin was hard.

His cough and expectoration have become gradually worse. His appetite and sleep have also failed. For the last ten days he complained of severe pains in the right arm. A microscopic examination of the pus confirmed DR. SCHIRMER'S suspicions regarding the character of the disease, who found in the contents of the abscess actinomycoses. He also found actinomycoses in the sputum. PROF. FENGER, to whom he had given some of the contents of the abscess, also found actinomycoses.

DR. NEWKIRK asked if the patient knew of any disease among the cattle he attended.

DR. SCHIRMER: He said there was no disease among the cattle, and nobody else had such a disease.

DR. W. T. BELFIELD said: The case is hardly one for discussion, because DR. SCHIRMER has not said anything about actinomycosis as such, but merely about the case. The finding of actimycoses in the sputum is very interesting; it is undoubtedly a case of actinomycosis of the lungs and must prove fatal. There are only some thirty cases recorded in which this parasite has been found in men. I am not familiar with the literature on the subject for the last year, but up to that time there had been no well authenticated cases of actinomycosis observed in man either in England or America.

DR. A. V. PARK read a paper on a case of

CARIES OF THE RIGHT PARIETAL BONE CAUSED BY RAILWAY INJURY.

The patient was a stout German boy, aged 16, who was injured September 18, 1883, sustaining various lacerations and contusions of the body, besides a V-shaped wound over the left ear and a circular wound nearly over the centre of the right parietal bone. No fracture of cranium was discovered, although at the request of DR. PARK the case was examined by the family physician and the railway surgeon on different occasions. Patient exhibited signs of collapse and rallied slowly. Erysipelas ensued. After fourteen days the boy commenced to regain consciousness, but could not distinguish one person from another, nor remember events which occurred only a few hours before. It was over a week before he had complete control of his senses. Seventy days after the accident a piece of exfoliated bone, size of three cent piece and thickness of external layer of cranium, was removed from wound over right parietal bone. More dead bone was detected, and ninety-two days after the injury an area of two and one-half inches in width by three

and one-half in length, of diseased bone was removed, the bone being removed down to the diploë. Erysipelas again ensued and lasted about one week. One hundred and fifty-one days after the injury the patient was discharged, with partial deafness of the left ear and impaired vision of the left eye, as the only unfavorable results of the injury. DR. PARK gave as the result of his observations of railway injuries the following conclusions: 1. Sloughing is the rule in contusions and lacerations. 2. Hæmorrhage may be little, but is apt to be great in injuries to head, or extremities where large vessels are lacerated. 3. Examination of wounds should be thorough, and is best done during period of shock. 4. Shock may be excessive and death ensue rapidly, or reaction take place slowly, with symptoms of collapse. 5. Amputations are attended with high rate of mortality, owing to liability of stump being attacked by erysipelas, osteomyelitis, sloughing, or pyæmia ensuing. 6. Erysipelas may ensue rapidly and must be manfully combatted. 7. A large majority of persons injured on railways recover but partially. The sequelæ may be paralysis, insanity, loss of memory, impaired vision, deafness, etc. These results may follow immediately, or not appear until months or years after the injuries were inflicted.

PHYTOLACCA DECANDRA IN THE TREATMENT OF BRONCHOCELE

BY J. D. ELY, M. D., MEDINA, MICH.

Of course it is taken for granted that notice of any agent that is superior to iodine, biniodide of mercury, and other time-honored and much used remedies in the treatment of bronchocele, and especially one that is free from the deleterious effect—such as iodism, derangement of the stomach, etc.—as frequently noticed and regretted of them, will be received by the profession with interest and profit.

Therefore it is with pleasure that I offer a few facts in regard to phytolacca decandra, which, I believe, is as near a specific for that troublesome disease as we have for any other.

In doing so, I wish it understood that I have tested thoroughly about all the remedies recommended by leading authors, and after comparing the effects and results of phytolacca with them, much prefer it.

It has been a favorite remedy with my father more than twenty years in the treatment of all glandular diseases.

It has never failed, in his hands, to cure all cases of bronchocele, curable by any means. upon which he has used it, and he has, because of his success, had more than the usual number to treat.

Before giving the report of a case illustrating its use, which I select from a number I have treated successfully during the past two years, it is important to note that much of the tincture and fluid extract of phytolacca on the market is worthless, and I have, from necessity rather than choice, prepared most of the tincture which I have used.

I would advise those who have given phytolacca a trial and condemned it, and any who may try it and not get satisfactory results from the article purchased, to prepare their own tincture.

The following method has always given us a reliable and satisfactory article; but before it, I may note, for the benefit of those not acquainted with phytolacca, that it grows in adundance in nearly all parts of this State, and is known to most farmers by its common name, "poke root."

Procure the fresh roots, and, after washing them clean, slice and put to dry where they will get the sun, till the water is as nearly dried out as is possible, then pack in a percolator—a fruit jar will answer—and cover with absolute alcohol, full strength.

(It is probable that many manufactures of it do not get a good article because they use old, dry roots, and diluted alcohol as the menstruum.)

Let it stand at least fifteen days, press out, filter, and it is ready for use. Dose, from three to ten drops.

It should be borne in mind that it acts slowly, and is designed to, in the doses recommended, as experience has proven, that in so using it the specific alterative effect desired is more safely and satisfactorily obtained.

Recent cases yield readily to the remedy, and are cured in from one to three months. Difficult cases of long standing, of which the following is a sample, will need treatment for a year or more:

LIZZIE M., aged 16 years, consulted me June 17th, 1885, for treatment of a bronchocele, the first appearance of which was noticed eight years previous. On examination, I found both glands and the isthmus involved, and so great was the enlargement, that the circumference of the neck measured nineteen and one-fourth inches.

It was more uniform than generally seen, was very hard, and so tightly filled the skin that it could not be moved. Pressure upon the laryngeal nerve was so great that the patient wheezed as if suffering from asthma, and could not walk rapidly because of the interference with respiration.

She presented the characteristic appearance peculiar to scrofulous diseases, and there was history of similar troubles among the relatives.

Bowels were regular, kidneys all right, and menstruation, which had been properly established at 13 years of age, was regular, and had always been so.

I may add here that the menstrual irregularity, mentioned by some authors as always to be noticed in these cases, has not been found, by me, to exist in any I have treated, and I do not belive it is common, or that the disease is, in any way, connected with disease of the reproductive organs, as claimed by some.

Recognizing this as a most difficult case, my prognosis was unfavorable; but the patient being anxious to try treatment, I consented to give it, and prescribed the following, which was used for about one year, and with success:

℞ Tinct. phytolac. decand., ʒ ss.
Syrup. simplicis, ʒ iijss.

M. Sig.—One teaspoonful in water 3 or 4 times a day.

Also—

℞ Ferri dialyzati., ʒ i.
Glycerini puris,
Syrup. simplicis, ää ʒ iss.

M. Sig.—One teaspoonful in water after each meal.

Ordered applications of the tincture to the glands night and morning, to be diluted with pure rain water if it caused much irritation—as it will sometimes—and, if necessary, to discontinue it for a few days, and to take plenty of outdoor exercise.

The only change noticed the first two months was that the glands had softened slightly. After that they decreased in size quite rapidly, and the improvement was marked in every respect, continuing till the neck became normal in size, the difficulty of breathing disappeared, and the patient considered herself cured, one year after beginning treatment.

She continued the application and tonic for a short time longer, at my request, however, to make "assurance doubly sure" and to prevent any recurrence—a plan which I have always considered good, and recommend.

I have under observation patients who were treated with phytolacca successfully eleven years ago, and, so far, the cures are permanent.

In one case only has there been any return of the trouble, and that was due to the patient considering herself cured and stopping treatment too early.

It is very important, I think, to always use a tonic when giving an alterative, and I never omit it

I have, in a few instances where there was difficulty in getting the patient to take the separate prescriptions regularly for a long time, combined the phytolacca with the prescription containing the dialyzed iron, apparently with as good results, but prefer to give them singly, and generally do.

Correspondence.

MANACA IN MUSCULAR RHEUMATISM.

I have treated quite a number of cases of muscular rheumatism, which is getting to be very common in this country, and in no instance have I had any reason to complain of the results obtained from the use of manaca.

It will only be necessary to give a history of one case, for its effects have been uniform throughout. The patient had been a sufferer for quite a number of years, and had tested the talents of distinguished physicians without receiving any material benefit. He had suffered much from malaria for four years, and physicians differed as to whether he had any syphilitic complication. If there was, it most probably was the result of vaccination during the war, as he presented no evidence of having contracted it in the usual way.

He was out shooting one day, during a small rain fall, and although he did not get very wet, a pain of a neuralgic character began in the region of his right nipple, and he became feverish and quite nervous Subsequently he was under treatment by physicians, but was often annoyed by neuralgic pains in various portions of the body, but more particularly in the muscles of the chest and back, occasionally in legs and arms. Any extra exertion produced them, though subacute. He was subjected to constitutional treatment of iodide potassium and mercury, without any material benefit, for several years, and finally came under my observation. I prescribed fluid extract of manaca in 35 and 40 drop doses three times a day. This he continued for two months, and the improvement was gradual and permanent, and to-day he expresses great confidence in being entirely cured. The duration of this "disease," the failure on the part of other physicians to relieve with standard medicines, his condition and the great improvement under the use of manaca, certainly should encourage us to give this remedy further trial in these cases.

THOS. P. GARY, M. D.

Ocala, Florida

USES OF IODOFORM.

Of late I have been reading up the treatment of dysentery adopted by many physicians, and I notice that they do not all say ipecac. and only ipecac, like DUJARDIN-BEAUMETZ, in his recent work on the stomach and intestines. This remedy may do very well in hospital practice, or in the firmly-attached friend's family, whose confidence you have so complete as to be able to leave a prescription for ipecac, and solemnly say it may cause vomiting at first, but afterward the stomach will tolerate it. But when you go to see a stranger and leave ipecac which

at first does make him vomit and strain enough to make him see stars, he generally offers it to the cat, or throws it out doors, and expects something else, or else wants another doctor. This summer I have treated a number of cases of dysentery, and never had such good succes with anything as with this:

℞ Pulv. opii, gr. xx.
Iodoformi, gr. xx.
Acidi tannici, ʒ ii.
M. Make xx pills.

Sig. One pill every two hours, unless better, or asleep.

I also order warm water injections, four times daily. One visit always suffices. It is a poor plan of treatment, and bad policy, to make the most money out of your case.

I cut off a finger the other day, and covered the stump all over with iodoform. It never ran a drop of pus. I also treated a very ugly cut on a man's leg recently with iodoform, and it healed without suppurating. I had a case of pleuritis, which I tapped and at one time drew out a gallon of fluid, and four different times one pint. The case never improved in the least until I gave an iodoform pill, ½ gr., four times a day.

I have used iodoform in various ways for the last three years, and it seems to be the best antiseptic and the best alterative for internal use.

E. B. Crone, M. D.

Kerkhoven, Minn.

SYZYGIUM JAMBOLANUM IN GLYCOSURIA.

During the month of June last, I was called to see Mrs. McF——, multipara, æt. 54. Her case was somewhat obscure, owing to her reticence, and being a very energetic business woman, she had kept going as long as possible.

In examining her urine I was interested in its peculiar color and odor, and proceeded to test it for sugar. On inquiry I found that for some two years she had been treated for "kidney trouble," and had taken a good many kinds of medicine. Taking an ounce of recently voided urine, I found it contained between 35 and 40 grains of sugar. I treated her to the best of my ability with such remedies as are usually laid down in our books as indicated in diabetes, until August 24th. On that day I succeeded in getting and preparing for her an infusion of syzygium jambolanum, one-fourth ounce to the pint of water. Dose, one teaspoonful three times per day, gradually increased to two tablespoonfuls four times per day.

On the 27th of August her urine showed 15 grains of sugar. I have not had an opportunity of making a test since, but am to-day (Sept. 6th) in receipt of a letter from the lady's daughter in which she reports continued and rapid improvement in her mother's condition.

During a practice of 35 years I have seen many such cases go down to the grave under the treatment of skillful, honest and earnest men, and was thus led to try a new method in this case. I did not follow any of the prescribed rules as to diet, but told my patient to eat any kind or kinds of food that she relished and that agreed with her.

The improvement which so promptly followed will, I am sure, convince anyone of the wisdom of giving the new treatment a trial in this class of cases.

C. C. Kingsbery, M. D.,

Milford, Michigan.

RUPTURE OF THE APPENDIX VERMIFORMIS.

S. E. Bryant, male, 45 years of age, came under my observation on the evening of the tenth of September last. I found him suffering great pain, and had been for the thirty-six preceding hours. A diagnosis of biliary calculus had been made. On the morning of the eleventh I found him free from pain. Temp., 96°; pulse, 100; hands and feet cold. On the thirteenth, death occurred from what I concluded to be shock, resulting from rupture of the gall-bladder, or ductus communis choledochus. The temperature did not rise above 96° after I was called. During the last fifteen years he had suffered more or less each year from very acute pain, which usually left him in a few days.

Autopsy thirty hours after death. On exposing the liver, its bladder and ducts were found perfect in every respect, with no evidence that there had ever been any trouble with them. Quite an extreme effusion of the liquid contents of the bowels was found in the peritoneal cavity. The appendix vermiformis was ruptured about the centre, which was the seat of ulceration. The case proves that appendix vermifornis may be a cause of extreme pain during a period of years. Can such a condition be determined during life, and would we not be warranted in surgical interference?

Thomas H. Briggs, M. D.

Battle Creek, Mich.

BORAX AND EPILEPSY.

In one of the copies of the Medical Age this year I saw an article copied from the Boston Medical Journal, in which Dr. Folsom recommended borax in some cases of epilepsy.

A boy, about 14 years of age, was brought to me March 2, 1886, for treatment, who had, for about two weeks after coming to me, from one to six convulsions each day. I then put him

on about fifteen grains of borax, three times a day. Have kept it up constantly in the same dose after each meal, and he has not had a single convulsion since—a period of a little over six months. With a liberal diet the same boy has gained thirty pounds.

Another lad, of the same age, apparently from the use of the same remedy, has had but one attack of convulsions, and that resulted, in my judgment, from an attack of a malarial fever, which yielded readily to quinine.

Other cases of epilepsy in my care, I confess, have not yielded to its use.

I only wish to express my opinion that it appears to be of value in some cases.

C. T. WILBUR, M. D.,
Supt. School for Weak-Minded Children.
KALAMAZOO, MICH.

The Medical Record, which has for several years been suspiciously interested in bald heads, quotes from an article by MR. EATON, in the Popular Science Monthly, to show that a sparseness of hair on the crown of the head is evidence of intelligence and refinement. MR. EATON holds that the more refined the show, the more fashionable the church, the greater is the proportion of bald heads. For instance, when PATTI was singing at the Boston theatre, forty-two per cent. of the men on one occasion, and forty-six per cent. on another, were bald-headed, while at JOHN L. SULLIVAN'S exhibition of the manly art, only twelve per cent of the men in MR. EATON'S vicinity were bald. He also found that forty-six per cent. at one of MATTHEW ARNOLD'S lectures, and less than twenty-five per cent. at a variety theatre, exhibited baldness or signs of baldness. At the fashionable Trinity church of Boston, nearly half of the men were either actually bald or on the road to baldness. MR. EATON'S curious observations, therefore, tend to confirm the view that the coming man is to be bald, and that the per cent. of baldness is in direct proportion to the amount of education and cultivation which a community receives.

According to the Talmud, one theory concerning the origin of alcohol is as follows, viz.: NOAH planted the first vineyard, SATAN being present and assisting in the work. After the vineyard was planted, SATAN slew a lamb, a lion, an ape, and a hog, and with their mingled blood watered the roots of the vines. This he did, he said, because he who shall taste for the first time of the juice of the grape will be a lamb; he who shall use it in moderation will become—for the time being—a lion; he who shall use it to excess will become an ape; and he whom it shall master will become a hog.—W. B. DAVIS, in the *Epitome*.

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Editorial.

TURPENTINE AS A REMEDY.

Improvement in the art of therapeutics does not solely depend upon the introduction of new drugs. The agents at the disposal of physicians are sufficiently numerous, and while his art is unquestionably improved by "recent introductions," there remains a rich, uncultivated field in remedies which have been known for a century. Among these remedies is turpentine. We have personally had occasion to demonstrate its value in the continued fever which prevailed to an unusual extent in this city during the present fall, and we are pleased to find in an article by DR. BEDFORD BROWN, of Alexandria, Va., in the Journal of the American Medical Association, that that gentleman has given the remedy an extensive trial, from which he is enabled to speak with an unusual degree of positiveness of its great value in affections of the alimentary canal. He holds that the dry, cracked, red, contracted tongue of fevers, indicates a similar condition of the mucous membrane lower down, and that this condition is due to causes which the anti-fermentative, anti-putrefactive, deodorant and antiseptic properties of the oil of turpentine remove. These properties, in connection with the restorative properties of the turpentine, make it a remedy of superior value. DR. BROWN is fully impressed with the belief that the oil of turpentine acts as a stimulant to the salivary, stomachic, pancreatic and intestinal secretions, and in this way becomes a promoter of digestive operations. In that condition of the system indicated by a dry, red, glazed, brown tongue, we may rest assured, he says, that the processes of digestion and assimilation are well nigh suspended for the want of appropriate secretions. The dry, inflamed and aphthous mouth of infants suffering from chronic mucous disease, when all secretion is in a great part suspended, calls imperatively for the use of some agent which has the power to restore these absolutely necessary factors of digestion, and among the agents which are administered with this end in view, there is none more potent

than turpentine. In our study of the treatment of intestinal diseases of infants, we have probably not attached sufficient importance to those septic influences arising from the acts of fermentation and putrefaction in the contents of the canal, and we have been too prone to trust alone to the agency of opiates, alkalies and astringents. Fermentative action, and its peculiar products in the contents of the digestive organs of the ill-fed, ill-nourished infant, suffering from dyspepsia, is the bane of infantile existence. These products consist of various acrid, irritating, animal and vegetable acids —lactic, butyric and acetic.

In gastralgia, due to disordered digestion, turpentine has been found to act almost as a specific. In the infantile catarrh of infancy, too, DR. BROWN has found it invaluable, and he attributes its usefulness to the properties above mentioned.

The enormous amount of lactic, butyric and acetic acids continually in the stomach and intestines of dyspeptic infants subsisting on artificial diet, acts as a corrosive and destructive agent on the delicate epithelium. Thus, a constant process is going on in those cases, of exfoliation of epithelium and erosion of the coats of the large intestines. The succeeding steps are engorgement, inflammation, ulceration and softening. The object of treatment is to repair the damages resulting from the catarrhal inflammation of the intestines, to restore lost epithelium, to re-establish suspended secretion, to heal erosion of the mucous membrane, and there is no remedy more potent to these ends than turpentine. In the primary stages of acute dysentery, when the symptoms are violent and accompanied with much fever, tenesmus and pain, the acute features may be much modified by the use of minute doses of mercury, ipecac and bicarbonate of soda, followed by tartrate of soda and potash in sufficient quantity to clear the intestinal tract. Following the use of these remedies, turpentine may be given to the best possible advantage, the local anæsthetic or anodyne influence of the oil on the gastro-intestinal mucous membrane, contributing very materially to the result.

In the class of cases above hinted at, the oil of turpentine is a valuable agent, and as a means of co-operation with other treatment for the relief of many aggravated, painful and difficult affections of the gastro-intestinal canal, it should occupy a high place in the physician's armamentarium.

OBSTACLES TO FECUNDATION.

The perpetuation of his species is one of the most imperative duties which man owes the state. While in some instances this duty is so religiously observed as to have won to the teachings of MALTHUS many adherents. The devices of the brothel have been so freely introduced into classes of society which stand most in need of multiplication as not only to have practically nullified the divine decree to multiply, as far as they are concerned, but also to have excited in the females of the same an amount of disease which has made gynecology one of the most profitable of the medical specialties. In the majority of instances of sterility the exciting cause has been the means which were employed early in the married life to prevent conception until "a more convenient season," when the desire and cares of society should be less keen, or, possibly, when the state of domestic finances should better afford the expense of a family. The majority of the cases which consult the physician for the relief of sterility are traceable to these causes. Nature having been thwarted for a number of years, refuses to respond to the desire when children are wanted. The physical condition in these cases is found to be chiefly a catarrhal condition of the uterus. In a report of one of PROF. PAJOT'S lectures given by DR. THOMAS LINN, Paris correspondent of the Philadelphia Medical Times, it is stated that of twenty couples who consult the physician because of sterility, ten or twelve of the women will be found to have uterine catarrh, due, doubtless, to the cause above mentioned.

The Professor gives also an analysis of the other causes of sterility. Among others is the narrowness of the external orifice of the neck of the uterus, this narrowness being usually associated with a peculiarity of form, the uterus having the "top"-shaped os, or the conical os of SIMS.

The third most frequent obstacle is the one most talked of by charlatans and ignorant medical men—they are versions and flexions. The normal uterus presents a certain degree of anteversion nearly in the axis of the superior strait. If this is exaggerated, there is an anteversion; the contrary state is retroversion, and the lateral inclined is lateroversion. Pregnancy brings a right lateroversion, the neck being on the left side. Flexions are much the same in name; but it is curious, says PAJOT, that the versions are greater obstacles than the flexions. That certain kinds of apparatus may give comfort is possible in these cases, but as to real cures they are all useless. He does not speak at present of prolapsus. We don't cure these deviations, because they are not maladies: they are infirmities. These women are no more ill than a person who is left-handed, unless there is also a catarrhal state, or a congestion, or an ulceration. Many women have a deviation without knowing it. It certainly very often constitutes an obstacle to fecundation,—one reason being that the *cul-de-sacs* formed make

a false route for the male organ and complicate the difficulty of fecundation.

Acidity of the vaginal mucus seems also to be a cause of the rapid death of spermatozoa. During the last twenty-five years PAJOT arrived at a very different conclusion relating to the frequency of fault in the male, than obtained previously, which will astonish you as well as it did me. More than ten years ago he found the proportion of husbands who were the obstacles to fecundation rise to seven in eighty cases. In late years some four hundred cases in which he examined the seminal fluid, he found one hundred in which the husbands were at fault and the cause of the sterility.

In regard to treatment PAJOT has the following which, to say the least, has some novel features: For the catarrhal states, use emollient injections for the first few days, to allay any congestion, and then during the intermenstrual period—that is to say not less than ten days nor more than fifteen after cessation of the menses—practice internal cauterization of the uterus, both the cavity of the neck and the body. Use for this purpose my porte-caustic mounted on very flexible whalebone, that cannot perforate the uterus. PROFESSOR RICHET uses a solid metal one; but in his hands any instrument will do: don't fancy it would do so well in yours. Place powdered nitrate of silver in the little cup, close it with some unguent, and penetrate slowly into the uterus, empty the cup, and the operation is over. If you still fear the porte-caustic, use these little whalebone sticks, which are mounted solidly with a little cotton, carefully wipe out the mucus to get at the real surface, wet the cotton with a little water, and rub it in powdered nitrate of silver, forming a sort of paste, which you can paint over the surface easily. Keep the woman in bed three days or more, and continue emollient injections, and follow them with astringent ones. As to the narrow conically-necked uterus, the best treatment is *dilatation*. I do not believe in SIMS' American divider, composed of two blades that are introduced, opened, and drawn towards you, as I have seen fatal results in two cases from its use. No; dilate gradually and largely the *external* orifice only; for, as the other gives passage to the menstrual flux, it will allow the spermatozoa to pass.

I wish now to teach you some therapeutical measures that I think have never been mentioned by any one, When you are advising a woman who has a deviation, see the husband apart. If she has an anteversion, tell her to prepare for the sexual act by not urinating for five or six hours beforehand, if she wishes to have children. If it is a retroversion, advise as follows: After the monthly period she must eat plenty of eggs and rice, and take a small pill every evening for three or four days (the pill is simply two and a half centigrammes watery extract of opium). During these days she must resist defecation and perform the sexual act. This device is based on anatomical and physiological facts, and will often succeed in removing these obstacles to fecundation. In one case the full bladder pushes the body of the uterus up, and in the second the full rectum corrects the deviation for the moment.

To give further indications, the professor related the case of a patient who had a left latero-version, making one of the false routes he talks of. Upon questioning the husband adroitly, he found that the conjugal act was performed in the usual classical manner—dorsal decubitus, in fact—and advised a change by placing the wife on her right side: conception followed and the woman had eventually five other children.

With these different methods he also advises sterile people to have connection *only* about the menstrual period, a few days before and after, and never at other times. As to the husbands with no spermatozoa or with insufficient ones, he advises gymnastics, fencing, swimming, velocipedes, walking, etc., exercise of the inferior members, good living, and continence.

CRIMINAL INSANITY.

In a murder trial which took place in this city last week, a very amusing exhibition of the general practitioner's knowledge on this subject was given on the witness stand. We reproduce the following conclusions on the subject, by CLARK, on the Medical Jurisprudence of Crime and Responsibility, for the benefit of these exhibitors, against their possible future appearance:

1. The natural history of crime shows that chronic criminals deviate from the normal type and approach those of the lower creation.

2. That many such cases are impotent to restrain themselves from crime, as are the insane.

3. That the moral sense may be hidden from the expediency by the cunning seen even in the brutes, until evoked by circumstances.

4. No man can make himself free from the physical surroundings in which he is placed.

5. Crime is an ethical subject of study outside of its penal relations.

6. Insanity and responsibility may co-exist.

7. Some insane people can make competent wills because rational.

8. The monomaniac may be responsible, should he do acts not in the line of delusion, and which are not influenced thereby.

9. Many insane are influenced in their conduct by hopes of reward or fear of punishment, in the same way as the sane.

10. Many insane have correct ideas in re-

spect to right and wrong, both in abstract and concrete.

11. Many insane have power to withstand being influenced even by their delusions.

Notes.

A Rochester druggist has dedicated the following to his best girl:

I love thee, Mary, and thou lovest me;
Our mutual flame is like the affinity
That doth exist between two single bodies;
I am Potassium to thine Oxygen.
'Tis little that the holy marriage vow
Shall shortly make us one. That unity
Is, after all, but metaphysical.
Oh, would that I, my Mary, wery an acid,
A living acid; thou an alkali
Endowed with human sense, that, brought together,
We both might coalesce into one salt,
One homogeneous crystal. Oh, that thou
Wert Carbon, and myself were Hydrogen!
We would unite to form olefiant gas,
Or common coal, or naphtha. Would to heaven
That I were Phosphorus, and thou wert Lime,
And we of Lime composed a Phosphuret!
I'd be content to be Sulphuric Acid,
So that thou might be Soda; in that case
We should be Glauber's Salt. Wert thou Magnesia
Instead, we'd form the salt, that named from Epsom.
Coulds't thou Potassa be, I Aquafortis,
Our happy union should that compound form,
Nitrate of Potash—otherwise Saltpetre,
And thus our several natures sweetly blent,
We'd live and love together, until death
Should decompose the fleshy tertium quid,
Leaving our souls to all eternity
Amalgamated. Sweet, thy name is Briggs
And mine is Johnson. Wherefore should not we
Agree to form a Johnsonate of Briggs?
We will. The day, the happy day is nigh,
When Johnson shall with beauteous Briggs combine.

The Chemist and Druggist has the following touching lines to a timid leech:

Nay, start not from the banquet where the red wine foams for thee,
Though somewhat thick to perforate this *epidermis* be;
'Tis madness, when the bowl invites, to linger at the brink;
So haste thee, haste thee, timid one. Drink, pretty creature, drink!

I tell thee, if these azure veins could boast the regal wine
Of Tudors or Plantagenets, the draught should still be thine!
Though round the goblet's beaded brim plebeian bubbles wink,
'Twill cheer, and not inebriate. Drink, pretty creature, drink.

Perchance, reluctant being, I have placed thee wrong side up,
And the lips that I am chiding have been farthest from the cup.
I have waited long and vainly, and I cannot, cannot think
Thou wouldst spurn the oft-repeated call: Drink, pretty creature, drink!

While I watch'd thy patient struggles, and imagined thou wert coy,
'Twas thy tail, and not thy features, that refused the proffer'd joy.
I will but turn thee tenderly—nay, never, never shrink—
Now, once again the banquet calls: Drink, pretty creature, drink!

The Canadian Practitioner takes the following from a daily paper as an illustration of how the ubiquitous reporter "gets onto" all the accidents which occur: "Good morning, gentlemen," said the doctor, as he walked into the newspaper office, "is the city editor in? Ah, yes, I see. MR. HUNTEMUP, there was an accident on Fremont avenue this afternoon that I thought you would like to hear of. MRS. JOHN PEDUNCLE was thrown out of her carriage and sustained a compound fracture of the right clavicle. She was taken home and medical aid summoned. Her injuries were skilfully attended to, and she is now resting easily. You might say that I was called and have charge of the case."

"By the way, doctor," said the advertising manager, looking up from his books, "I would like to insert an advertisement for you in the Banner. I'll let you have it a year for $30 an inch, payable ———"

"Sir," interrupted the doctor with a scowl, "I never advertise. It is contrary to medical ethics. Good day, gentlemen."

DR. JAMES G. WAKELEY, editor of the London Lancet, is dead. He was the son of the founder of that journal, and for over a quarter of a century was its presiding genius. The Lancet under his editorship grew to be a power in lay, as well as in professional circles. Its position is unique, no other medical journal published having the circulation which it has among non-professional readers, and yet it never contained anything which would compromise its high professional character. Some time before his death the late DR. WAKELEY made a special request that the following confession of faith should be introduced into any notice of his life which might appear in the pages of the Lancet: "Feeling my deep responsibility to God for the position in which in His providence He has placed me, I desire to testify to the comfort derived during my sickness from a lively faith in our Lord Jesus Christ, and that I die in the sure hope of a glorious resurection."

The Boston Medical and Surgical Journal remarks of this class of writers: SIR HENRY THOMPSON is among the noble army of the medical novelists, or, as we might almost say, has gone over to the majority. The neurologist novelists have a fund of experience in their specialty which is often available for the purposes of fiction. But what SIR HENRY finds in his specialty to adapt for such ends, is a matter of curious conjecture. The title of his latest work is announced as "All But." Theories are rife among those who have as yet failed to obtain the book, as to whether the plot turns on a case of defeated catheterization, or of the persistence of residual fragments after a lithotrity.

When a great ruler dies in Europe, the custom is for some one to call aloud in his ear three times In some parts of this country, Kentucky, for instance, a similar method has been resorted to in order to determine whether the person is actually dead. In the state mentioned the Archives of Pædiatrics is authority for the statement that one calling is sufficient. A friend steps reverently to the couch of the deceased and whispers—not necessarily loud—"Let's take a drink." If he makes no reply he is dead beyond peradventure, and the funeral is proceeded with.

According to DR. BURGGRAEVE, of the University of Ghent, the great panacea for all ills is common salt. According to his theory, salt is the great regulating agent. If the blood be too rich, salt will clarify it; if it be too poor, salt will strengthen it and furnish it with the necessary elements. He estimates that the quantity of salt which every adult should consume daily is two-thirds of an ounce, and he goes the length of saying that if everybody would only take salt, centenarians would become almost as common as new-born babes. What has become of all the centenarians?

The mayor of St. Louis is a versatile man. According to a medical panegyrist of the city which he rules, he is "a successful politician, a cultured, learned, able, high-minded, refined, thoroughbred gentleman." And, as if this were not praise enough, the same enthusiastic admirer proclaims that he (the mayor) is equally graceful and successful, whether he be welcoming national conventions of doctors, lawyers, butchers, cattlemen, or Knights Templars." What greater meed of praise can be bestowed on mortal!

DR. BULKLEY, the New York dermatologist, will be amused to find himself confounded with DR. BUCKLEY, the Methodist minister, whose remarks on the faith cure we reproduced in the last issue of the AGE. The sage contemporary who thus confuses the two gentlemen, says that the faith cure is "of the devil because its fruits are those of the devil," and that in some minds the tendency to mental derangement is "irresistable" (*sic*). That settles the matter. What's the use of psychologists puzzling their puny brains over the matter any longer?

KRAATSCH points out a sign of "German measles" which is almost pathognomonic, according to his experience, having been present in every case he met with in one epidemic. This is an enlargement of the cervical lymphatic glands, particularly those over the mastoid process. In most cases there is also an enlargement of the glands of the axilla and groin. This glandular enlargement has never been observed by KRAATSCH in cases of common measles.

According to the Texas Courier-Record, there are seventy practitioners of medicine at Dallas. The population is just 35,000. Thus we see, that there is one physician to every 500 souls. But the question that puzzles a couple of recent comers to the city, is: How can a physician support himself on a population of 500; especially since the other sixty-eight do the practice for 450 of this number, and the other fifty are, at present writing, classically speaking, strictly whithin physiological limits?

A prince once spoke of medicine as a science of guess-work. "But, sire," returned a physician, "suppose an Egyptian darkness were suddenly to come over the land. Would you not rather trust to a blind man to guide you to Paris, than to one who might see in the light, to one who had learned to grope his way in the darkness, than to one who would stumble and go astray the moment his clear sight was dimmed?"

Technics: There is much in the practice of medicine, properly followed, to develop the better part of a man's nature. It teaches him to be gentle, to be kind, to be careful, to be attentive, to be courteous, to be patient. It is refining in itself, and the association with dependent creatures should make a man a gentleman—a gentleman in the truest, highest, best sense of the term.

Some physicians are very ingenious in devising causes for the ailments which their unerring powers of diagnosis determines. One of these discovered the cause of the lead-poisoning from which he declared his patient to be suffering, to be the habit of sucking a lead pencil. The patient did not know that lead pencils do not contain lead; neither did the doctor, but that made no difference.

The Detroit College of Medicine is now open for the season. The number of students in attendence is reported in excess of that entered at the corresponding time last year. Merit will tell, and we are pleased to learn that the aggregation of talent in the consolidated schools, is being appreciated in quarters in which appreciation does the most good.

"Is the doctor in?" enquired a patient of the housemaid of a physician. "No, he is not," was the reply. "When would I be most likely to find him alone?" "Well, his office hours are from two to three in the afternoon. Call then and you will be pretty sure to find him alone."

"Actinomycosis" is the scientific name of the disease known among cattle as "swelled head." Swelled head may occur in man, however, without actinomycosis. We know of several chronic cases among the latter. They are accompanied with illusions of subjective grandeur.

A French authropologist has evolved the fact that the human body should weigh as many kilogrammes as it measures centimetres, after deduction of the first metre. Thus a man measuring one metre eighty centimetres (six feet) should weigh eighty kilos (176 pounds).

Pulque is the stimulant of Mexico. It is made out of the juice of a cactus, and is sold at a cent a glass. It is said to look bitter, smell loud and taste yellow, but it gets there just the same.

Professor: "You see the right leg of this patient is shorter than the left, in consequence of which he limps. Now, MR. SORTER, what would you do in a case of this kind?" SORTER: "I'd limp, too."

SWIFT once said that the reason a certain university was a learned institution, was that most persons took a little learning there and few brought any away with them, and so the learning accumulated.

A writer from St. Joseph, Mo., to the Medical Brief, says that a fine boy was recently born in that city, of a mother whose age was sixty-five and a father aged seventy-one. They do tell some wonderful stories out west.

"Take a tablespoonful of this mixture after each meal." "But, doctor, it is so very seldom that I can get a meal," replied the poor patient. "Oh, well, in that case, you can take it before each meal," said the kind-hearted M. D.

Therapeutic Brevities.

INTRA-PERITONEAL INJECTIONS IN ACUTE HÆMORRHAGE.—RUTGERS (Ctrlbl. f. d. med. Wissensch., August 7, 1886) reports the case of a woman who had lost so much blood from post-partum hæmorrhage that she was apparently moribund. The veins did not swell on applying ligatures above them, so that it was impossible to employ intra-venous injections. The following solution was injected into the abdominal cavity through a cannula:

Salt, 90 grains.
Sodium hydrate, 5 grains.
Distilled water, 34 fluidounces.

After experiencing severe pain in the abdomen for three days, during which time the temperature was subnormal, the patient rallied and did well,—*N. Y. Medical Journal.*

THUYA OCCIDENTALIS FOR WARTS.—"Thuya occidentalis" (arbor vitæ) is credited with the remarkable property of causing the disappearance, in a very short time, of all kinds of vegetations and warty growths, by its internal administration. Many successful cases are reported by French physicians; in fact, it is said to seldom or never fail. It is given in the form of tincture, from ʒ ss ʒ j, two or three times a day. Its action is regarded as quite phenomenal. in this direction. Among others, DR. CONSTANTIN PAUL reports the cure, within fourteen days, of non-syphilitic warts which covered the genitalia of a woman. It is said to be equally serviceable in the case of condylomata and other similar growths.—*Medical World.*

APONE: A NEW KIND OF PAIN EXPELLER.—As we imagine from its counter-irritant action, it would be very likely to relieve pain, we note that the following is said to be the mode of preparation of a sort of pain-killer recommended by POULET (Pharm. Zeit.) under the name of apone:

Capsicum, 20 parts.
Water of ammonia, 10 parts.
Oil of thyme, 1 part.
Chloral, 1 part.
Alcohol, 60 per cent., 100 parts.

Digest the capsicum with the alcohol and ammonia during four weeks, filter, and add other ingredients.—*Med. and Surg. Reporter.*

HYDROFLUORIC ACID IN THERAPEUTICS.—In a remarkable thesis on this new subject, CHEVY concludes that the vapors of hydrofluoric acid can be inhaled without inconvenience when diluted with air in the proportion of 1:1500. It is an antiseptic, and a powerful antiferment, stopping the fermentation of milk, urine, bouillon, and preserving meat in the proportion of 1:3000. Its employment in pulmonary tuberculosis, diphtheria, and as a dressing for bad wounds, has yielded results worthy of further study. Great care should be exercised in its use in asthmatic, hæmorrhagic, or emphysematous subjects.—*Revue de Thér.*

THE THERAPEUTIC ACTION OF COMMON SALT.—BRANCHE (London Med. Record, July 15, 1886), reviewing recent observations on the use of this domestic article, asserts that salt is a valuable remedy in the treatment of scrofula, anæmia, and tuberculosis. PIDOUX advises phthisical subjects to use it in excess with their meals. BOUCHARDAT observes that salt lessens the excretion of sugar in diabetics, and at the same time diminishes their thirst. Reliable observers have reported cures from the administration of salt in doses of from 150 to 225 grains in cases of intermittent fever.—*New York Med. Journal.*

A Cure For Freckles.— Dr. Halrin's procedure (American Practitioner and News) is as follows: The skin being washed and dried is put on the stretch with two fingers of the left hand, and a drop of carbolic acid is applied exactly over the patch. When it dries, the operation is completed. The skin becomes white, and the slight sensation of burning disappears in a few minutes. The thin crust which forms after the cauterization should not be disturbed; it detaches itself spontaneously in eight or ten days, leaving a rosy coloration, which is soon replaced by the normal color of the skin.

Gonorrhœa.—Dr. Alexander V. Khrul, of Irkutsk, has for two years successfully treated gonorrhœa with an ointment of iodoform, one part, and vaseline, ten parts, somewhat liquified by heating, and then aspirated by suction into a fine elastic catheter, the latter being anointed externally with the same ointment, and introduced to the depth desired. The ointment is blown out by the operator's or patient's mouth. The painful phenomena of the acute stage disappear in 24 hours. This method is especially indicated in persons with irritable urethra and kidneys.—*London Medical Record.*

Snuffs for Coryza.—Rabon (Deut. Med. Wochen.) recommends the following powders to be used as snuff in coryza:

1. Menthol, 2 parts.
   Roasted coffee, 50 parts.
   White sugar, 50 parts.

Mix, and take as snuff.

2. Cocaine hydrochlorate, 1 part.
   Roasted coffee,
   White sugar, ää 50 parts.

Mix, and use as before.

Pulmonary Tuberculosis Treated by Inhalations of Hydrofluoric Acid.—Seiler submits his patients to daily inhalations of an hour's duration, and twenty or thirty in number. He saturates the air by a spray apparatus, which contains a mixture of the acid and water in the proportion of 1–3. This air is forced into the inhaling room in the proportion of about ten metres to a cubic metre.

The inhalations are absolutely innocuous, and, he affirms, of notable benefit.—*Le Prog. Med.*

Thrush, or Sore Mouth of Infants—Is often due to the rough and careless swabbing out of the mouth of the child by the nurse, who uses the corner of a coarse towel, and proceeds as if she were scrubbing the kitchen floor or back stairs. In Prague, since Obstein has forbidden the washing of the mouths of infants born under his care, stomatitis has almost disappeared from the lying-in, whereas, previously 52 per cent. of the infants born there, and under ten days old, were afflicted.— *Canadian Practitioner.*

Permanganate of Potassium in Burns and Frost-bites.—Zubon (Medizinsko Obozrenië; London Med. Record) reports forty-four cases of burns and thirteen of frost-bite which were treated with local applications of a solution of the permanganate containing one or two grains to the ounce of water. He finds the solution most useful in the treatment of frost-bite; it relieves pain, allays inflammation, and prevents suppuration in blisters. In burns of the second degree a half-grain solution is preferable.—*New York Medical Journal.*

Whooping Cough.—The editor of the Provincial Medical Journal reports the following: "We had nine children suffering from pertussis in the Nursery, Halifax Union; we connected a piece of gas tubing with the gas burner, and turned the gas on, and each child was brought sufficiently near so that the gas might be inhaled. We repeated this for some days, and can report most favorably on the results. The intensity of the paroxysms was diminished, and the duration of the disease cut short. The infants recovered without any complications.

To Prepare Cow's Milk for Young Infants—(Keating).—To a four-ounce mixture composed of one ounce of ordinary milk and three ounces of water, add one ounce of ordinary cream and about 80 grains of sugar of milk (a level teaspoonful and a half). This closely resembles woman's milk, though containing less casein and more sugar than most authorities give as the result of their investigation. Still, for very young infants this is an advantage rather than otherwise.

Earache.—A liniment is recommended by Pavesi for this affection, composed of camphorated chloral, 5 parts; glycerin, 33 parts; and oil of sweet almonds, 10 parts. It is applied twice daily on soft cotton, being introduced as far as possible into the ear, and may also be rubbed behind the ear. The pain is almost instantly relieved, and the inflammation in many cases is subdued. The liniment must be kept in carefully-closed bottles.

Medical Progress.

OBSERVATIONS ON THE USE OF SOME OF THE NEWER REMEDIES IN DISEASES OF THE UPPER AIR PASSAGES.—In a paper read before the American Laryngological Association at its eighth annual congress, and published in a recent number of the New York Med. Journal, DR. E. L. SHURLY reports the following interesting facts regarding the application of some of the newer remedies:

There is, perhaps, no department of medical science which has enlisted more interest during the last few years than that of therapeutics, and it ought to awaken in us the strongest feelings of pride and encouragement to see the mist of empiricism which has for so many ages obscured this field gradually dissipating before the light of scientific progress. The results already obtained have been, in great measure, due to the aid which chemistry and physiology have furnished clinical medicine, the former by resolving drugs into their proximate principles, and the latter by pointing out the effects of these upon the tissues and functions of the healthy economy. Now, no department of practical medicine, it seems to me, stands more in need of guidance for its therapeutics than laryngology; for the selection of applications, with few exceptions, depends more upon individual experience and experiment, or empiricism, than scientific principles. Therefore, it would seem that we ought to rigidly study the proximate and remote effects of the application of medicinal agents to the air-passages, and their influence in relation to systemic treatment of various sorts, in the hope of evolving with certainty the hidden facts regarding the relationship between the condition of the part and the absolute effect of the medication. Pursuant to this line of thought I have, for the past eighteen months or so, been studying the effects of some of the alkaloids and glucosides when used topically. I do not present these observations as conclusive, only with a view of eliciting interest and discussion. I shall omit the general therapy of these drugs, of course, referring to some effects only.

Aconitine.—I have records of twenty-five cases in which it was used either in the form of a spray or pigment. Two were cases of laryngeal phthisis; seven of chronic pharyngitis—in five of which there existed acute exacerbation; eight of acute pharyngo-laryngitis; three of chronic follicular amygdalitis; three of chronic laryngitis; and two of pharyngeal neuralgia. The amount used each time varied from $\frac{1}{150}$ to $\frac{1}{150}$ of a grain. In each instance there occurred in a few minutes the well-known physiological effects of tingling of the tongue and feeling of choking and numbness, to which was superadded, when applied in the nasal fossæ, lachrymation, with sneezing and vertigo. On two occasions these local symptoms were very severe and distressing to witness.

Only once did I observe a marked effect on the pulse immediately after application. With a small dose— $\frac{1}{150}$ gr.—these symptoms passed away in about two hours; with the larger doses from four to six hours elapsed before the patient became comfortable.

As to the local effect, in every case there arose in a very short time, almost immediately, an active hyperæmia. Even in the case of phthisis the pale color was deepened to a vivid rose, or a near approach to it. The ulterior effect was, in the acute cases, to cut short the course of local inflammation; in the cases of chronic pharyngitis, etc., there was no permanent effect, the cases of pharyngeal neuralgia—severe paroxysmal pain on one or other side of the pharynx—occurring in a pregnant woman, and a woman suffering with supposed chronic inflammation of the ovary respectively. The application of the pigment with a brush twice daily produced immediate and marked relief, although not a cure.

From these observations, therefore, I think that this agent as a local application was of little benefit, except in a few particular cases, while its very unpleasant effect upon the sensations of the patient was entirely out of proportion to its therapeutic value.

Agaricin (a glucoside from the *Boletus laricis*).—From the good effects in the abatement of nocturnal sweating, which I have observed from the administration of this agent, I was led to use it topically in a few cases of chronic nasal and pharyngeal disease, but, as I did not observe any physical or therapeutic effect, I have nothing to report at present.

Arbor Vitæ.—On account of its reputed efficacy in causing the disappearance of syphilitic warts, I was led to use this drug as an application to intra-laryngeal papillomata. In one case, that of a boy fourteen years of age, who was suffering with a progressive growth of these tumors on the vocal cords and ventricular bands, it certainly acted remarkably well. Only one of the growths—the largest—was removed by the forceps, the others disappearing under the use of a spray of the aqueous extract, applied once or twice daily, for a period of about three months. Perhaps some of the gentlemen will remember having seen this patient in my office during the time of the last meeting of this association at Detroit; if so, you will remember that we all concluded that, on account of the imminent prospect of suffocation, tracheotomy would soon be necessary. There is not a vestige of a neoplasm in his larynx now. I will add that a renewal of the growths took place in February, but speedily disappeared again under this treatment.

In another case, in an adult, where there were five papillomata in the region of the anterior commissure of the vocal cords, this remedy only partially succeeded, the forceps having been resorted to for the larger ones. The treatment, however, seemed to prevent their renewed growth.

In still another case, one of cystic tumor of the right vocal cord, the arbor vitæ had no effect whatever, unless, perhaps, to suppress catarrhal inflammation. Whether this action of the drug is due to any specific property, or simply its astringent property, I do not know. I am aware that there are cases on record of like results following the use of tannic acid, but in my experience I can remember only one case of this kind where the application of tannic acid seemed to take any part in the dissipation of the growth.

I have also used arbor vitæ in the local treatment of some cases of chronic laryngitis with benefit.

In preparing the fluid extract for spray, to render it unirritating, it will be necessary to

drive off nearly all the alcohol by means of heat, boiling it down to a syrupy consistence, and afterward add water to the amount of one third to one-half of the amount distilled off, then filter.

Ammonium Glycyrrhizate.—As a spray I have obtained no particular effects. I have prescribed it for a large number of cases of acute and chronic bronchial catarrh, in doses ranging between two and five grains. In the chronic cases it seemed inferior to ammonium chloride and ammonium iodide, but in the acute uncomplicated cases it has proved itself a valuable expectorant.

Cannabine Tannate (from *Cannabis indica*).—On account of the difficulty of making a solution of this substance, I have used it mostly in the form of powder mixed with starch, or in the form of an ointment with vaseline. I have used it in about fifty different cases, sixteen of which I have notes of, and a majority of these were cases of nasal or naso-pharyngeal disease. It possesses astringent properties, and is also a decided local stimulant. When applied undiluted to the nasal mucous membrane it causes considerable irritation, which lasts for a period of two to four hours, producing lachrymation and swelling of the turbinated mucous membrane. But when applied diluted with starch in the proportion of two to five grains to the drachm, or with vaseline in like proportion, it has, as a rule, no such irritation, but a decided astringent, and afterward soothing effect. It has proved a valuable agent, according to my experience, as a substitute for tannic acid, which latter I have ceased to use in the nasal chambers on account of its irritating effect; with children suffering from swelling of the nasal mucous membrane, either acute or subacute, it will prove an excellent and efficient application, especially when mixed with vaseline.

Cadmium Sulphate.—This salt, which has been highly extolled as an astringent, I believe is not superior to sulphate or chloride of zinc. I have used it as a spray and pigment in about thirty cases, in the proportion of from one half to five grains to the ounce, and have noted no particularly beneficial result over zinc sulphate and chloride or silver nitrate, excepting in one case where the unpleasant results following the application of any solution of silver nitrate forbade its use. The cadmium certainly acted well, and seemed to bring about the desired result.

Cotoin (the active principle of coto bark).—Although there is not much literature upon this subject, it is reputed to be a good remedy for chronic diarrhœa and the diarrhœa of phthisis. I have administered it in two cases of diarrhœa of phthisis, but without signal success. I have used it locally in about twenty cases of nasal and pharyngeal disease, twelve of which I have notes of. It is a powerful irritant to the nasal and pharyngeal mucous membrane—both healthy and diseased—and leaves no reactionary effect. Its best effects are obtained in cases of atrophic nasal and pharyngeal catarrh, and, when diluted in starch or sugar in the proportion of one part to three or four of excipient, it is, I think, quite equal if not superior to any other application—excepting galvanism.

Coniine Hydrochlorate (a salt of the alkaloid of *Conium maculatum*).—From the well-known selective action of conium on the muscular system and sympathetic nerve, one would suppose that this alkaloid—readily diffusible as is—would act signally as a corrective in those local disorders of the throat and larynx characterized either by co-ordinate or ordinate spasm, etc.

I have notes of ten cases representing various spasmodic actions of a pathological nature of the pharynx and larynx, one of which was an hysterical laryngeal cough, and one a local chorea, in which I applied this agent repeatedly in progressive doses (both by means of spray and pigment) without any sensible result in modifying the diseased action. I am therefore disposed to regard it as wanting in value for a local medicament.

Cocaine.—As medical literature is already surfeited with items regarding this remarkable drug, I will spare your feelings and pass it by.

Daturine (an alkaloid from *Datura stramonium*).—From the known value of stramonium as an anti-spasmodic, and its especial utility in the relief of spasmodic asthma, I was led to give this alkaloid a thorough trial as a topical remedy in affections of this sort.

I have notes of twenty-three cases subjected to experiment, as follows: 1, bronchial asthma; 1, spasmodic asthma; 2, periodic laryngeal congestion; 3, hay fever; 1, chronic bronchitis (bronchorrhœa); 3, hysterical pharyngeal catarrh; 5, influenza; 1, laryngismus (with ovarian disease); 2, chronic naso-pharyngeal catarrh; 2 acute coryza; 2, chronic coryza; 2, chronic laryngitis.

The dose varied from $\frac{1}{100}$ to $\frac{1}{50}$ of a grain, and in some of the cases was repeated two, three, or four times a day; in each case, when the dose was large enough or frequently enough repeated, there appeared to the patient sooner or later the characteristic sensation of dryness of the fauces, etc. The patients with asthma were not sensibly affected by the treatment; two of those with hay-fever were very much benefited by the applications if repeated often enough (it was used in the form of spray), but the trouble was not arrested; three of those with influenza were decidedly relieved by three applications daily of a spray ($\frac{1}{100}$ of a grain), while the two others were not at all relieved. The neurotic cases were only relieved by a diminution of secretion, which, however, lasted but a few hours, necessitating a repetition of the dose. In the other cases I could observe no particular effects.

Ethyl Bromide.—This has been used almost entirely as an inhalation for the relief of cough. I have tried it in a large number of cases; it is not quite so efficacious as chloroform, but there is much less general anæsthesia from its continued use, and it leaves no unpleasant after-effects. I think, therefore, that it is deserving of more extended use for the relief of severe dry cough and spasmodic asthma.

Hyoscyine.—The hydrobromate is the salt which has been used. I have been unable to note any marked effect, proximate or remote, from the local use of this salt—excepting in a few cases there arose a sensation of dryness which passed off in about an hour.

It produces no apparent change in the condition of the mucous membrane to which it is applied. The dose used varied from $\frac{1}{100}$ to $\frac{1}{150}$ of a grain.

Hydrastine (alkaloid from *Hydrastis canadensis*).—I have had but a limited experience

with this drug. for, seeing no particular effects, and hearing such *bitter* complaints from those to whom I had applied it, I soon abandoned its further employment.

Iodol.—I have used iodol in a few cases of ulceration of the mucous membrane, both specific and ordinary, and observed that it has nothing like the power to arrest the ulcerative process which iodoform possesses, although I can not say but that slow improvement and healing followed its use. It is sincerely to be hoped that this substance will prove to be a capable substitute for iodoform, because it is free from odor and causes no bad taste. I have always applied it by insufflation.

Papain (papaw juice).—In one case of diphtheria I applied the fresh juice, and in six other cases it was applied in the form of a glycerole —either one-half or two-thirds strength; but no solvent action was observed on the exudate in any case. I may add that this was the experience of two other practitioners in our city, who also tried the remedy in cases of diphtheria. Therefore, so far as this limited experience goes, it has utterly failed to sustain its reputation as a remedy for the relief of real diphtheria.

Muscarine Sulphate (alkaloid of *Agaricus muscarius*).—Very little is known about this drug, but it is said to resemble in its physiological action that of physostigmine. I have applied it in doses of from $\frac{1}{50}$ to $\frac{1}{10}$ of a grain in twelve cases characterized by dryness of fauces and larynx, without any result excepting in two. One of these patients presented signs of great dryness of the fauces, and lack of buccal and salivary secretion, accompanying general nervous prostration; and the other had "dry catarrh" of the pharynx and larynx. In both of these cases a spray, repeated three or four times a day, seemed to afford great relief. The immediate effect was a pleasant tingling sensation, soon followed by comfortable heat and more secretion. No effect on the pupil was observed. In the other cases no immediate or remote effects, either objective or subjective, could be observed.

Physostigmine Salicylate.—This was thoroughly tried in a number of instances, of which I have six recorded. In but one instance did it produce any physiological action, or in any obvious way relieve the pathological condition of the parts. This case was that of a delicate young man who had from time to time suffered from spasmodic stricture of the lower pharynx and œsophagus; he experienced almost immediate relief from an application of $\frac{1}{250}$ of a grain, which lasted about six hours, when another application became necessary. At the end of forty-eight hours the attack ceased. Nothing which I had ever used locally in this man's case had acted so well as this agent in cutting short the course of the attacks.

Pilocarpine Hydrochloride.—I have five recorded cases of pharyngeal catarrh characterized by a sensation of dryness and consequent distress in which I have tried this remedy, in doses varying from $\frac{1}{20}$ to $\frac{1}{4}$ of a grain, but without any positive result.

Piscidin (a glucoside from *Piscidia erythrina*).—I have nine cases recorded in which this was used either as spray or pigment, in doses ranging from $\frac{1}{480}$ to $\frac{1}{24}$ of a grain. In only one instance could there be observed any proximate or remote effect, and that was a case of phthisis characterized by a very persistent and aggravated sensation of tickling referred to the pharynx. In this subject the application of a pigment in the proportion of $\frac{1}{120}$ of a grain to the drachm, every two or four hours, seemed to relieve the trouble in two days.

Resorcin.—Although attention was first called to this agent in 1860—when it was presented as a substitute for carbolic acid—yet medical literature does not show that it has been at all extensively used until very recently. I have used it considerably during the past year, and believe it to be an important addition to the pharmacopœia. It is practically odorless and tasteless, while it is soluble in water; it is very feebly caustic, and, although a weak, still an efficient antiseptic. I have the records of thirteen cases in detail in which resorcin was used with good effect. Three were secondary syphilitic ulceration; one, tertiary; six ozæna—of which one was an aggravated case where the turbinated bones had disappeared; one eczematous lupus of nose and pharynx; one, ulcerating and eczematous lupus; and one, typical herpetic pharyngitis.

The case of ulcerating lupus needs some additional remarks, inasmuch as it was a peculiar one; the subject, a child nine years old, had been suffering for nine months; first, with an obstruction of the nasal passages and an irritating discharge therefrom, followed gradually by the growth of fungous granulations in these passages and about the edges of the nares and upon the roof of the mouth (about the centre of the hard palate). When I saw her in February, 1886, there were extensive ulcerating granulations in the nasal passages and upon the surface of the roof of the mouth as well as at the margins of the nares; the nasal column was also ulcerated and its cartilage denuded. The patient's general condition was also much below par. Having anæsthetized her, I destroyed with the galvano-cautery all the fungous tissue that I could reach and applied iodoform thoroughly. The iodoform was applied for several days, as was also resorcin (in the proportion of one to four and one to six), but the main treatment afterward consisted of resorcin used as a spray or pigment. The galvano-cautery was applied to two small spots in the mouth once since, but otherwise the treatment has consisted of the application of resorcin (and vaseline to moisten the parts) every day, conjoined, of course, with a recuperative and tonic plan of treatment. I saw the patient last on the fifth of this month (May), and observed that she was in good health, with very little deformity about the nose, and no reappearance of the trouble excepting at a spot situated on the inside of the cartilaginous nasal column. She is still under treatment. In the cases of ozæna, especially the one with the loss of the turbinated bones, the effects of this agent, used once or twice daily, as spray, were quite prompt, and it seems to me remarkable. The patient was under treatment about five weeks. I saw him about two weeks ago, and he told me that he was comparatively free from trouble, and had been for the last three months; he uses a douche every day (as might be expected) of salt and water. Has no pain now and no more discomfort than is usual for ever after such a lesion. The ulcerative process is apparently checked.

Sanguinarine nitrate (a salt of the alkaloid of

Sanguinaria Canadensis).—No special results follow the local use of this drug, but for internal administration in a certain class of cases it is highly useful as a stimulating expectorant. I have noticed no unpleasant effects or depression from it in doses of $\frac{1}{10}$ to $\frac{1}{4}$ of a grain in syrup. I regret that the time allotted to this paper necessitates the omission of many important details connected with the study of these agents, but hope this imperfect and compressed report, as it were, may serve the purpose of inducing some of the gentleman present to take the subject up for particular clinical study.

I trust that I may be able next year to add something further of interest in this line of work.

On the Treatment of Acute Traumatic Tetanus by Curare. — Dr. J. S. M'Ardle, F. R. C. S., Lecturer on Surgery, St. Vincent's Hospital, Dublin, publishes, with comment upon the treatment followed, the following remarkable case of tetanus treated to a successful issue by curare. We reproduce the narrative of the case in full, and also the more important of the author's observations.

Case.—The case to which I desire to call attention is that of —— Murphy, aged 21 years, admitted into St. Vincent's Hospital suffering from strangulated inguinal hernia. His general health was good, and as he was anxious to have the hernia cured, I cut down on the external abdominal ring, stitched the neck of the sac with fine chromosized catgut, and brought the walls of the inguinal canal together with strong catgut. Everything went well until the tenth day after the operation, when he complained of pain and tenderness over the lower part of the abdomen and difficulty in opening his mouth. On the twelfth day after the operation, the hernia came down during a spasm of the abdominal muscles; his condition on the 13th was one of extreme distress. During the previous night he had bitten his tongue very severely several times, and slept badly. His condition was as follows: His abdomen was hard and tympanitic; dorsal muscles powerfully contracted; patient resting on occiput and heels; upper eyelids drawn down; eyebrows raised; pupils greatly contracted; face wore an anxious expression, and he complained very much about his tongue, which was swollen and deeply indented by the teeth, which could only be separated a quarter of an inch; breath very offensive; all the voluntary muscles were in a state of spasm, the slightest noise or disturbance increasing their rigidity and rendering the patient extremely miserable. There had been no evacuations of the bowels for three days, notwithstanding the fact that calomel in ten-grain doses had been given each day, and bromide of potassium and hydrate regularly. This state of affairs lasted two days longer, and the patient was almost exhausted, when I injected one-half a grain of curare with the following effect: Immediately after injection dyspnœa set in, and he complained of uneasiness in the cardiac region; his pulse became uncountable, his face purplish, and his pupils dilated. He had complained of dimness of vision and of seeing double. In seven minutes after injection the dorsal muscles relaxed; the abdomen became slightly soft; perspiration broke out over his face and chest, and sinking down into the bed, he fell into a sound slumber, which lasted three hours, during which time he was not disturbed by spasms. In the fifth hour the bowels were evacuated, and it was only at this time that spasms began to reappear. In the sixth hour he had another dose of curare, which acted as well as the first. Purgatives of every kind were avoided, and yet the bowels acted regularly; and although the patient occasionally suffered a little, he was in a state of comparative comfort from the time I commenced the curare until the spasms disappeared. I noted that as long as his pupils remained dilated, spasms, if they occurred at all, were very slight, and this dilatation rarely passed off until four or five hours after injection. Consequently I ordered $\frac{3}{4}$ gr. to be given every sixth hour, with the result that the patient suffered very little until he was quite restored to health. He was three weeks under treatment, and the effects of the curare—as dilatation of pupils, quick pulse, incoördination of muscles—lasted for six days after the injection was omitted. The slight variations from day to day only show that the urinary secretions increased after a few days, at which time the patient complained of thirst. For the first few days after injection there was a considerable flow of saliva, mixed with pus and mucus, and the discharges from the bowels were very dark and fœtid.

Remarks.—It will be noted in the above case that in from six to ten minutes after the injection of curare the muscles became relaxed, with the exception of the abdominal ones; respiration became labored, lips cyanotic, pulse very rapid, pupils widely dilated, and that in no instance did more than 10 minutes elapse after injection without the most marked relief being obtained. An important point in connection with this case is the fact that, under the influence of curare, the bowels were regular, although constipation was the rule before its administration. This I look upon as evidence of the absence of tetanic spasm of smooth muscles and of the power of curare to keep the sphincters in a state of relaxation.

Now that I have noted the effects of curare in this case of more than extraordinary gravity, I am desirous of calling attention to the method of administering the drug Since it loses all its power when taken into the intestinal tract, we have only to consider its action when employed epi-, en-, and hypo-dermically. When applied to unbroken surfaces it has little or no effect, and hence its use in this way is now completely abandoned. The endermic method is also unpromising, as the varying conditions of the surface to which it is applied cause the action to be very uncertain. Hypodermic injection requires care, as, even when used in this manner, the drug may act inefficiently. In looking over the history of cases unsuccessfully treated with curare, one is struck by the fact that failure (in the majority of them at least) depended rather on the method of administration than on the inactivity of tne drug. The rules which should guide us in the use of curare are:

1. If a watery solution be used it is necessary to dissolve a fresh supply every few days, as the active principle with some resinoid materials precipitates early.

2 In injecting, the needle should be passd horizontally under the skin, so that rapid action might be avoided; in my case, whenever

the needle was allowed to enter deep sutures the effect of the drug became alarming.

3. The dose, to be of service, must be large, and frequently repeated—½ to ¾ grain every fifth hour; some even go so far as to state that ½ grain is the proper dose for an adult.

4. The solution should be filtered, else very troublesome abscesses form at points of injection; such abscesses occurred in the early part of my case.

Some few writers advocate the use of small doses; the history of their cases, however, shows the worthlessness of this opinion, since the ones which have not succumbed under treatment by small doses were exceptionally mild, and should not be classed amongst cases of acute traumatic tetanus.

One great difficulty in connection with the treatment of tetanus by curare lies in the fact that no two specimens of this drug agree in strength, and hence experimental injections (into rabbits or dogs) should be made before using the fresh sample.

The amount of cardiac distress produced by curare is an objection to its use; the heart beats become innumerable owing to the paralysing effect of the drug on the inhibitory fibres of the vagus. It is possible that this trouble may be overcome by using nitrate of pilocarpin, which has an opposite effect on the cardiac nerves.

The fact that we are not acquainted with a reliable antidote to curare is also objectionable, When the Indians desire to prevent its action they immerse the animal in water and give it large quantities of rum, or even administer the juice of the sugar-cane. To keep up artificial respiration is probably the only thing we can do, unless, indeed, ligature or amputation above the point of entry of the poison. Carbolic acid is a powerful antagonist to the drug, but the difficulty of introducing it without injurious effect renders it valueless. Pilocarpine, although possessing an opposite action on the heart, will scarcely counteract the ill effects of curare.—*Dublin Journal of Medical Sciences.*

THE USEFUL ADMINISTRATION OF ARSENIC IN DISEASES OF THE SKIN.—DR. EDWARD L. KEYES, in the Journal of Cutaneous and Venereal Diseases for August, 1886, thus discussed this mooted question·

"Arsenic is distinctly a cutaneous stimulant; therefore, in the initial stage of a malady possessing an inflammatory element (notably eczema), it is not only not useful, but may be actually pernicious. Used after the acute stage has been controlled by appropriate means, it often speeds the parting guest and prevents it from lingering in a state of prolonged and desperate chronicity. A fitting analogy is the use of friction and massage in joint disease. This remedy is very efficient, but it has its time and place. When the joint is acutely inflamed, massage only adds fuel to the flame; but when the fire has been subdued, then the stiffness and loss of motion, perhaps otherwise inevitable, may be often overcome my the skillful application of massage. If the joint would get well without the massage, there is no call for its use, yet that it has its use can hardly be denied; and so with arsenic.

Arsenic, in my opinion, is not useful, unless the stomach tolerates it well and appropriates it in a kindly way. When digestion is interfered with by the use of arsenic, nausea or inappetence produced, it generally does no good, often harm. In such instances, preparing the stomach beforehand, changing the diet, disgorging the liver, giving attention to the patient's personal habits, will allow the remedy to exert a influence where, unaided, it would be without value or even harmful. The same remarks apply exactly to the administration of cod-liver oil,and often to the use of other tonics.

The different preparations of arsenic may be called into play here in selected cases. I have more than once taken a patient with chronic psoriasis, who had hopelessly given up the use of Fowler's solution because it troubled his eyes, ruined his digestion, and seemed to irritate his skin, and conducted him to a cure by combining arsenious acid with nux vomica and pepsin, with some change in diet, or by substituting the arsenite of soda for the arsenite of potash. The Bourboule water, a mild solution of the arsenite of soda, is a very gentle way of administering arsenic; too gentle, as a rule, but yet I believe often effective of good, particularly in the case of weak digestion. Fowler's solution, especially if it has been long prepared, is very likely to disagree with digestion, and for this reason I seldom use it.

The more diffused, generalized and chronic that a given cutaneous malady is, the greater do I consider the indication for the use of a suitable preparation of arsenic, if the stomach will take it kindly. The more localized an affection is, be it ever so chronic, the less indication is there for arsenic in a general way, in my opimion.

Generalized chronic eczema, generalized psoriasis, and pemphigus may, perhaps, be selected as the maladies in which arsenic may be expected to exert what may be termed a certain specific general effect in controlling the symptoms — exceptions to the contrary, notwithstanding. Yet the combination of mild doses of arsenic with other remedies is not without value in some localized maladies, and in combating some forms of acne and some cutaneous manifestations of syphilis. Much also might be said, but more cautiously, in the case of neurotic maladies as affecting the skin, and where an element of nervous debility keeps down the patient's general vitality, and prevents other suitable remedies from being effective.

In short, I think that there is so much value in the intelligent use of arsenic that it seems a sin to allow its association with that time-honored humbug, promiscuous blood-letting, as an appropriate analogy, to pass unchallenged."

ANOTHER APPLICATION FOR ANTIPYRINE.—DR. JOHN BLAKE WHITE, physician to Charity Hospital, New York, sends the following to the N. Y. Record:

"The high road to truth is the knowledge of facts, and well it is for searchers after truth when facts can be ascertained and carefully recorded.

"Symptoms are the alphabet, cases the language, of disease, and that physician subserves his profession who carefully records his experience.

"During the past two years I have abund-

antly tested the therapeutic value of the drug known as antipyrine, in various forms of headache. The prompt relief obtained through its use compels me to accord to it a high rank among our medical resources. I have already called attention (Medical News, July 10, 1886) to the potent antipyretic power possessed by this remedy in the management of various forms of fever, and have observed that after its administration the urgent symptom of headache, so uniformly present in these cases, was soon controlled.

"Antipyrine undoubtedly possesses bradycrote properties in a high degree, as the pulse is notably softened and moderated in frequency soon after a proper dose of it has been taken. It produces some somatic change favorable to a reduction of the pulse in cases of fever, and so exerts a calming influence upon the vaso-motor system. The capillaries, through its agency, doubtless dilate, and local congestions are dissipated, as the relieved patient usually sinks into a refreshing repose soon after its exhibition. In the course of large experience with antipyrine I have found that, when administered in masterful doses, it not only promptly relieves the symptom of headache whenever present, whether resulting from disordered digestion, disturbance of the menstrual functions, loss of sleep, undue mental effort, or even associated with dreaded uræmia, but also possesses reliable prophylactic virtues against recurrent attacks of cranial neuralgia. So confident am I of the power of this remedy to disappoint neuralgic headache when imminent, that I have instructed many patients, who are liable to such visitations, to keep in readiness and take a dose of antipyrine as soon as they have premonition of its recurrence, and all so far testify in favor of its efficacy.

"The value of this remedy in the above respect has not only been tested in my hospital and private practice, but I also record the fact that it has proved successful in the hands of professional friends, upon whom I had urged its employment for the relief of neuralgic affections of the head and face. I have been singularly impressed with the promptness of relief which often followed the administration of even a single dose of fifteen grains of the antipyrine. The grateful relief from headache usually ensues within half an hour after the drug is taken. A sense of drowsiness ordinarily supervenes, followed by a brief but sufficient slumber, and the patient awakens quite relieved of this distressing symptom. I have never yet seen the sleep-disposing properties of antipyrine alluded to by any other observer, although this effect seldom fails to ensue when a full dose such as I have named has been taken."

THE EXCRETION OF DRUGS BY THE MAMMARY GLANDS.—A good many observations have been made upon the subject of the medicines excreted by the mammary glands. It has been claimed that mercury, iodine, bromine, arsenic, strychnine, chloroform, sulphur, and chloroform may be thrown off by this gland when taken into the stomach of the nursing woman. It cannot be said, however, that our knowledge of the subject is as complete and definite as it should be, and hence, the recent experiments by FEHLING are of interest. FEHLING observed the effects on nursing, of various drugs given to the nursing mothers. According to the Paris correspondent of the British Medical Journal, when doses varying from two to three grammes of salicylate of soda were administered to the nurse, every time that a child was suckled within an hour after the administration of the dose the salicylate appeared in it its urine. After an interval of twenty-four hours there remained no trace of the drug. When the child was suckled too soon after the medicine had been taken, the salicylate could not be found in its urine. Elimination was completed at the same time in the mother and the child. With iodide of potassium the results were the same. The milk, when analyzed, gave the characteristic reaction. In the infant, elimination lasted seventy-two hours, in the mother seventy-four. After twenty-four hours the milk still contained iodide of potassium. With ferrocyanide of potassium reaction was very pronounced in the maternal urine, but absent in the child's. Prolonged applications of iodoform upon vaginal and vulvar wounds of women in parturition, after prolonged use, generally resulted in iodine being found in the milk and urine of the mother, but not always in the urine of the infant. The child was never indisposed, even when iodoform was used to dry up the umbilical cord. There was only a small quantity of mercury transmitted through the milk of a nursing mother, and its presence was not constant. It appeared that the food of wet-nurses—even acid fruit-juices and vinegar—had no influence on their nurslings. THORNHILL had stated that he had observed prolonged sleep occur to children after administering to their wet-nurses such narcotics as tincture of opium in doses of from twenty to twenty-five drops. FEHLING observed neither prolonged sleep nor constipation in the children. Hydrochlorate of morphine or chloral, in tolerably strong doses, did not affect the sucklings. Subcutaneous injections of moderately strong solutions of sulphate of atropine produced very pronounced symptoms in the mother, and dilatation of the pupil in the infant, which disappeared in twenty-four hours. This substance should, therefore, be employed in very feeble doses. In a very great majority of cases the milk of a woman attacked with fever had no influence on the nursling. In those rare cases where the temperature reaches 104°, the variations in the child's temperature were identical with those of the mother. In some instances children had died of intestinal catarrh where the mother's milk could be the only cause of the affection. BUMM has observed, in a case of inflamed breast, the passage of the micrococcus from the milk into the digestive apparatus of the child. —*Med. Record*, Sept. 11, 1886.

THE DIURETIC ACTION OF WATERMELON.—In the course of a prolonged study of remedies used in Russia as diuretics, POPOFF (Vratch, No. 4, 1886) finds that watermelon has been commended as an extremely cheap but effective substitute for grapes, in the treatment of chronic congestion of the liver, chronic intestinal catarrh, etc. It is extensively used by the peasantry in southern Russia (especially near the river Don, and in the Caucasian districts)

in the form of the freshly expressed juice, as a diuretic draught in cases of dropsy, uro-genital affections (especially gonorrhœa), etc. The author experimented with the inspissated fresh juice or syrup of the fruit, and with commercial melon-honey (*arboozyni mïod*). The diuretic action proved most striking; when animals received from 50 to 100 grammes of the syrup (with food) in twenty-four hours, the daily quantity of urine was three or four times greater than under ordinary conditions; again, on intra-venous injection of the syrup, "the urine for several minutes flowed in a stream from a canula tied into the ureter." On the subcutaneous injection of 0.4 to 0.7 gramme into frogs, the syrup rapidly slows the cardiac action up to complete arrest in diastole, and produces prostration with voluntary movements, while reflex action with the excitability of the motor nerves and muscles remain intact. When very large doses are used, in the latest stages there is observed, also, a failure of reflexes and of nervo-muscular excitability, but the phenomenon is then undoubtedly nothing but an ordinary symptom of præmortal agony. In dogs the internal administration of 500 grammes at a time produces no effect except powerful diuresis. Intravenous injections of one or two grammes of the syrup cause an immediate increase in the secretion of the urine, the latter assuming a dark color and containing sugar. This increase lasts for ten to sixty minutes, and is accompanied only by a slight fleeting decrease in the blood-pressure. On the injection of 0.25 to 0.5 gramme for each kilogramme, a considerable fall of the pressure and a great acceleration of the pulse rapidly follow. An intravenous injection of 3 grammes per kilogramme produces a further fall of pressure and a fleeting increase, with a subsequent sudden enormous decrease in the frequency of the pulse, the animal dying from cardiac paralysis. Experiments show that the quickening of the cardiac action is dependent upon the syrup acting on the peripheral ends of the vagi. In all cases intravenous introduction of the syrup rapidly produced a strong sedative effect, "the animal remaining strikingly quiet, and giving no response to tactile or even pathic irritation." Another group of experiments showed that the diuretic action of melon-syrup was dependent mainly upon its direct influence on the renal tissue.—*London Med. Record.*

More About the New Antipyretic, Antifebrin.—It would seem as though there were already a sufficient number of antifebrile remedies to satisfy the most enthusiastic therapeutist, but the list is being added to almost daily, and the clinical mine shows as yet no sign of threatened exhaustion.

The latest discovery in this direction is announced by Drs. Cahn and Hepp, of Strassburg, in the Centralblatt für klinische Medicin, of August 14, 1886. The substance is known, chemically, as an acetanilid or phenyl-acetamid, the formula for which is $C_6H_5NHC_2H_3O_1$, but the writers have given it the more convenient name of antifebrin. It is a clean, white, crystalline, odorless powder, imparting a slight burning taste when placed on the tongue. It is almost insoluble in cold water, but freely in alcohol and alcoholic liquids, such as wine. It melts at 235.5° F., and sublimes unchanged at 557.5° F. It possesses neither acid nor basic properties, and is very rebellious to the action of most reagents.

The authors have experimented with the remedy in a number of febrile troubles—among others, typhoid fever, erysipelas, acute articular rheumatism, pulmonary phthisis, and septicæmia—and state that the results obtained were very satisfactory. It is given in doses of from four to fifteen grains, shaken up in water, dissolved in wine, or enclosed in wafers. A maximum dose of thirty grains per diem was not exceeded. In general terms it may be stated that it is about four times the strength of antipyrine. The effect of the drug upon the temperature is noticed at the end of about an hour, and attains its maximum usually in about four hours, passing off again, according to the size of the dose, in from three to ten hours. The action of antifebrin manifests itself externally by a reddening of the surface and moderate perspiration. The patients sometimes complain of a cold feeling, though there was never any decided chill noticed. The pulse-rate falls proportionately to the temperature. There was never any nausea caused by even large doses.

In conclusion, Drs. Cahn and Hepp speak enthusiastically of the marked antipyretic properties of the new drug, and of the absence of any untoward symptoms attributable to it. It has also, they claim, the advantage of cheapness, being obtainable for the moderate price of about twenty-five cents an ounce at wholesale.—*Med. Record.*

The Use of Manaca in Rheumatism.—Dr. F. Spencer Halsey, while house physician at the Almshouse and Workhouse Hospital, at Blackwell's Island, during the summer of 1885, employed fluid extract of manaca in many cases of different forms of rheumatism. He gives the clinical record of seven cases as typical of the class in which manaca may prove of service.

Case I was acute at the outset, but became chronic after the acute symptoms had subsided under the administration of salicylate of sodium. Oil of gaultheria was tried for a few days without benefit, then the fluid extract of manaca was given, and all the symptoms underwent marked improvement. When the patient was discharged, a month later, she was enabled to get around with little difficulty. The remaining six cases were chronic from the beginning. The fluid extract of manaca gave beneficial results in three of them; in the three others no improvement resulted. The remedy was given in fifteen-minim doses at the start and rapidly pushed to ʒ j, three times a day. In one case the drug was even increased to ʒ ij, but the patient experienced no relief from his rheumatic pains, and complained of dizziness. The drug was discontinued, and oil of gaultheria substituted with good results.

Dr. J. Berger (St. Louis Med. Jour., May, 1886) states that he has used manaca in rheumatism for about five years, and that it has given better results than any other single remedy he has ever employed, and that it is perhaps better than any combination of remedies. He has used it in all forms of chronic rheumatism, and

thinks there is no doubt as to its possessing anti-rheumatic properties to a great degree. He would explain its *modus operandi* by the power it has of eliminating lactic and uric acids from the system, and preventing their formation in excess, thus assisting digestion and assimilation.—*N. Y. Med. Jour.*, Sept. 11, 1886.

SUBPREPUTIAL MEDICATION.—The editor of the Medical World reports in the July number of that journal the successful treatment of an obstinate case of acute inflammation of the urethra, involving the bulbous portion and possibly the neck of the bladder, by means of topical applications beneath the prepuce on both sides of the frænum. The medication employed consists of five grains of morphine rubbed up with half a drachm of lanolin, and a portion of the ointment about the size of a grain of wheat was used at each application. To this combination was added the muriate of cocaine in such quantity that about a quarter of a grain would be applied each time. In commenting on this case the editor says: "Thus it seems that we have an efficient and easily managed mode of treatment for most of the local diseases of the genito-urinary apparatus. If begun promptly we believe that it will abort gonorrhœa. It will certainly relieve urethral and vesical irritability immediately, and the cure may be permanent when not dependent upon stone or other mechanical cause of irritation." In the August number of the World he states that further trials afford additional evidence of the efficacy of this method of treatment.—*Gaillard's Med. Jour.*, Sept., 1886.

GASEOUS MEDICATION PER RECTUM.—The Lancet of August 7, 1886, states that M. BERGEON has recently communicated to the Paris Academy of Sciences a new method of treating disease by gaseous rectal medication. His experiments have been mostly confined to the treatment of pulmonary diseases, for which he prefers sulphurous mineral waters. He passes from four to five liters of carbolic-acid gas through half a litre of sulphur-water, and then introduces the gas into the rectum, the operation being performed twice in the course of 24 hours. It is stated that after a few days there is a marked diminution of the cough and expectoration, while the sweating ceases and the general condition of the patient is much improved; meantime, careful physical examinations show a notable improvement in the local condition. The treatment is equally successful in the early and in the advanced stages of the disease.—*N. Y. Med. Jour.*, Sept. 11, 1886.

RULES FOR THE ADMINISTRATION OF ANTIPYRINE.—PAVAY (Wiener Med. Woch.; Glasgow Med. Jour.) has employed this drug in a large number of cases and gives some useful rules for its administration. He adopts a middle course in regard to the dosage. When the temperature does not exceed 103° F. he divides 31 grains into three powders, and administers one powder every half-hour. If the thermometer registers 104°, three doses are given as before, each dose consisting of 15½ grains. With a temperature of 105° and above, he gives 62 grains in four doses, half an hour apart. It is seldom, the writer asserts, that the temperature fails to fall from 2° to 4°, and to remain lowered from six to sixteen hours. If for any reason the stomach will not retain the drug, it may be given by the rectum in doses of from 30 to 45 grains, or hypodermically in a fifty-per-cent. solution.

CHRYSAROBIN AND SALICYLIC ACID IN PSORIASIS.—DR. GEORGE HENRY FOX, in the second edition of his Photographic Illustrations of Skin Diseases, speaks of a combination of chrysarobin, salicylic acid, and collodion for the external treatment of psoriasis. The formula which he advises is as follows: Chrysarobin, 10 parts; salicylic acid, 10 parts; flexible collodion, 100 parts. This combination is known at the New York Skin and Cancer Hospital as the Compound Chrysarobin Pigment. DR. FOX speaks very highly of this treatment. Chrysophanic acid causes more staining of the integument, and sometimes excites a pretty severe dermatitis, besides injuring clothing. This combination does not produce these unpleasant results.

IODOFORM IN CHRONIC UTERINE CATARRH.—DR. KUGELMANN, of Hanover, relates his experience with iodoform, which he was induced to try by its good effects on a nasal and laryngeal catarrh in his own person. His method of application of the drug is by insufflation with a metallic catheter, with lateral openings near its beak, by which the powder is taken up, and, being inserted within the uterus, it is expelled by compressing an elastic ball at the other end. The applications are made twice a week. The method is painless and free from danger, and has been very successful in the author's hands. Previous dilatations by laminaria or other tents, or by metallic dilators, may be necessary.

NITRITE OF AMYL AS AN ANTIDOTE FOR OPIUM.—L'Union Médicale reports the case of a person who took two ounces of laudanum, and showed every symptom of opium-poisoning—coma, small pulse, feeble and infrequent respiration (six to the minute), coldness and cyanosis. Belladonna proved useless, while inhalation of nitrite of amyl immediately improved and ultimately restored the patient.

SIERRA SALVIA IN GONORRHŒA.—DR. W. A. GORDON (Gaillard's Medical Journal) has had good results in gonorrhœa from twenty-drop doses of the tincture sierra salvia, given thrice daily. It is usually given in glycerin, flavored with orange or lemon syrup.—*Western Druggist.*

A NEW CAUSTIC.—It is reported that a mixture of calomel and benzol makes a very efficient caustic for the removal of epitheliomatous growths.—*Med. Record*, Sept. 4, 1886.

The Medical Age.

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Original Articles.

CHICAGO MEDICAL SOCIETY.

[OFFICIAL REPORT.]

Stated Meeting, Sept. 20, 1886.

J. E. TODD, M. D., Second Vice-President in the chair.

DR. N. S. DAVIS gave his

IMPRESSIONS OF THE BRITISH MEDICAL ASSOCIATION.

An abstract of his remarks is as follows:

The British Medical Association held its recent meeting at Brighton, the most fashionable and desirable watering place in England, very favorably situated for such a meeting of the profession of that country, being accessible to London as the great central point and having accomodations that cannot be found in any other town or city of moderate size in Great Britain. The British Association impresses one as being a body of men more advanced in life with more solidity than our assembly, not more intellectual development, but more of what you might call sturdy physical development. Indeed, this impression of solidity is forced upon the mind about everything. We excel them very much in exterior ornamentation, variety of architecture and in a great many ways, but for an impression of solidity and steadiness without haste, as an ordinary rule they excel us.

The British Medical Association is not a representative body in any sense, but was composed originally much after the fashion of calling together an assembly, organizing a national body and selecting a certain number to constitute a council and submitting the business affairs to the council. Subsequently a rule was adopted by the original council qualifying the profession in any given locality to form a local society and adopt such rules as were not in opposition to the constitution and by-laws of the national society; these societies were recognized as branches, and each member of a branch became nominally a member of the general body with a right to attend the general meeting, but they are not entitled to take part in the general government. They may elect one, two or three members of the council, so that as branch after a branch has been organized, and the membership increased, it has greatly enlarged the council, until, I gather from the proceedings of the Association, the council of the British Medical Association numbers 71. This council has the entire control of the organization; they determine the places of meeting, and all matters in reference to the workings of the organization come before them first. Certain matters are brought before the general body at their meeting for their sanction, but they must originally go through the council. The council has at least four stated meetings in the year; they meet every quarter, and if business of importance is to come before them they may have other meetings. At the annual meeting of the Association the programme is so arranged that, when they open at half past twelve (they do not hold sessions in the forenoon), the council holds an hour's session; that is the meeting of the council of the preceding year. New members of the council are elected by the branches yearly, so that new members come in each year and others go out, and the council is not always made up of the same parties. Following this meeting, two o'clock is appointed as the time for the meeting of the general body, but that did not occur this year; it was crowded out. At a subsequent hour we had what they called the council of the present year. The first meeting was the council of 1885, the next, council of 1886. The sections held no meetings the first day. I watched the proceedings carefully with special reference to learning what might be of use to our own National Association. One of the complaints made against us is that we lose too much time in eating and drinking, and social occasions, and too little advance is made in real science and professional knowledge. The meeting of the council was held with closed doors. This peculiarity runs through everything, the council not only prepares the reports on business matters, but when they are submitted to the general body the council designates the man to move its adoption and the man to second the motion. I do not think that would be tolerated in America over one meeting, but it is a uniform, regular custom there and they seem to take it very easy.

The three sections that had the largest attendance were Medicine, Surgery, and Public Medicine. They have the same trouble there as here: there is a certain class always coming and going. They come in and sit down, and if at a little distance they can't hear very well, they sit a little while and don't get enough of

the run of the thing to interest them and they go to another Section, so they are always moving about. So the Pathological and Laryngological Sections, one was held in the bedroom of old KING GEORGE and the other in his china closet, a cupboard capable of seating not more than 20 or 30 people, and these seats were not full. While the attendance does not exceed our attendance there is about the same shifting and changing as at our general meetings. But the papers that were read had this characteristic to a greater degree than can be said of the papers as a whole with us: those who read papers had taken more pains to prepare them carefully and to make them cover the ground fully. They had spent more labor in their preparation. There was another feature — until the last three meetings there has not been any attempt with us to have parties informed of what particular papers are to be read in any of the sections, so that they might be prepared to lead off in the discussion of the papers. In 1883 in the Medical Section there had been pains taken to do this; certain papers were to be read, and several parties in different parts of the country were informed that a paper would be read on a certain subject and they were assigned to lead in the discussion. The idea was to make the discussion of more value. This same course has been taken in a limited degree in our meetings since. It is a general practice in the British Association. The officers of the sections when they learn what papers are to be presented, judge as far as practicable who can impart interest, and have them informed of the general import of the paper and ask them to lead the discussion. Hence, they elicit genuine benefit from the papers that are read and from the discussions that follow. Many papers were prepared that were not read; undoubtedly they will find their way into print as they do with us; the title was read and referred without anybody's knowing of what they were made. Sometimes they are made of an abstract, the author thinks he will write it out, but fails to do so. I think in their work they are more deliberate, more complete, they exhaust a subject more nearly, and they endeavor to have the discussion so conducted as to elicit the most information from it. In studying their work as a whole it seemed to me that there are some things we might copy with advantage.

Some member may be here who remembers the proposition made in our own National organization years ago when the sections met and chose their officers. A proposition was made to change the by-laws so that the officers of the sections should consist of a president and secretary selected at each annual meeting for the next year, so that there would be officers already elected and the organization of the section would be perpetuated. I remember that the late DR. GROSS made this motion, that instead of having reports from standing committees on medical education, medical literature, and so on, which we had had previously, these committees be dropped and in their stead the Association select at each meeting men supposed to be qualified for that especial work, in order to present an address to the general assembly, one on medicine, one on surgery, and one on obstetrics and diseases of women and children. That differed from the English programme only in substituting obstetrics and diseases of women and children for State medicine, but it was designed for the same purpose, to have one carefully-prepared address read at each of the three last meetings, one on Wednesday, one on Thursday and one on Friday, while the president of the Association would have an address on Monday especially designed for the general body. I seconded DR. GROSS' motion, but instead of it being carried it was referred to a committee, as was also the proposition so have the officers of the Sections appointed each year for the next, and the next year the committee reported in favor of having the officers appointed for the next year, and at the same time they reported in favor of having the president of each Section present an address to the general body on the improvements in the Section over which he presided. That was a substitute for DR. GROSS' motion. He and I opposed it on the ground that the presidents of the sections to be chosen each year ought to be selected from the older men, giving them an honorable position, but yet they would not be the men that would be likely to be adapted to read such papers However, the proposition of the committee carried. Now we have seven or eight Sections with seven or eight addresses before the general body, and what is the result? We find time the first day for the president's address, but the other days of the general meeting do not afford time enough for all the presidents to read their addresses, they are crowded off to the last day and one-third of the addresses prepared by the presidents of the Sections are announced by title and then go over. They crowd the entire time of the general meeting of the body, and I think it would be a great deal better if we were to change our by-laws and appoint the first day for the president's address, which should be of a high order, covering the general field of medicine, another to surgery, and another to obstetrics and gynæcology, or public medicine as you choose. Perhaps for the world at large, it would be as well to sometimes change the order. Then let the president of each Section deliver his address as he pleases on any subject of interest to the Section. This would insure a larger attendance and promote the work of the Section, and yet would not crowd the entire time of the general meeting as it does when we try to get in seven or eight general addresses.

That, I think, would be a real and substantial improvement in our body that we might copy from the British Association. And then we might go on perfecting still further the arrangement of the papers and interest parties to be ready for brief discussion.

There has been a good deal said of late years about the work of the nominating committee. The nominating committee is appointed in a hurry by little knots gathered together who want to get through. The committee is hurried to do its business and consequently the business is done very imperfectly. It has been claimed that we ought to have a more steady and conservative body, and the council of the British Association has been suggested as a pattern, but I do not think an organization like the British council would satisfy this country in any degree; I think we would not get along with it two years without rebellion all around. But it seems to me in studying the matter over, that we might remove the real evils we suffer from and yet not incur the evils that would follow from attempting to make a permanent council. It has been suggested that it be so arranged that one man would hold his place nine years; instead of that I think all the evils from which we are suffering could be obviated by appointing a business committee to consist of two members from each State in the Union. Let each State Society that is represented in the organization be entitled to two members of that business committee, and elect them the first year to hold office two years, and after they get started they would have one to elect each year, so that it would be permanent. By electing a new member each year it would be conservative and not totally changed. All the work that now devolves on the nominating would be done by this business committee, and if selected with proper care it would be a convenient committee to which might be referred various propositions that come up, and which require careful consideration by members that represent the whole country.

There is an evil in the British council that is complained of now; they say this council has four meetings a year and they have to meet in London because London is the head centre of Great Britain. The practical working of that is that the profession within a radius of one hundred miles of London controls that council. It costs money to go from Edinburgh, Cork, Dublin or remote portions of England to London, and a very few out of the whole number of seventy-one go. I learned that there were seven meetings held last year and thirteen of the members did not attend any of them. Not only that, but the remoter districts have found that their delegates so rarely attend, on account of the expense and loss of time, that half a dozen of them reported that they had not elected delegates. Now if we were to appoint a permanent body four-fifths of them would let their interest die out. Suppose you get up a council that is to meet and transact business three times or even twice a year, how many would be found to go from the Pacific Coast or from the north to a central point? It would not take ten years to gravitate so that your council would be in the hands of those within a hundred miles of the central point of meeting. If you make that Philadelphia, or Washington, or Chicago, the whole body would be ruled by a territory of two hundred miles, simply because parties would not pay out their money and spend their time to attend. They will not in Great Britain, and they are discussing the propriety of getting up some mode of compensating them to induce them to go. The plan I propose will, I think, after some degree of consideration, be found to obviate all the real evils we suffer from in hasty action and hasty nominating committees, and yet it would always secure us a satisfactory working body that would be reasonably representative of the several States to attend to such things as are required to be attended to, and it would be a standing body of intelligent men to whom we could refer such things as would require consideration. The features that I have mentioned are characteristics that struck me as belonging to the British Association, which differ from ours.

In regard to the International Congress: without solicitation the council of the British Association altered the programme of one of their days and announced that on Thursday at a certain hour the delegates from the American Association would be heard in regard to the International Congress. When the time came the hall was fuller than on any other occasion, the room was packed and through the hallways and along the corridors with people evidently having a decided interest in hearing what we had to say, and as the other Americans insisted on my taking the lead I went on the platform and occupied half or three-quarters of an hour in simple explanation. I made no allusion to anybody's differences except in general terms; we had had our troubles, and our frictions and our errors on all sides, but out of it all had come an organization truly National in its character, made up of delegates from all the States in the Union. This organization appointed an executive committee to which had been transferred all further management of the Congress. This National committee had reported their work to the last meeting of the American Medical Association, and it was unanimously sanctioned, and so I felt justified in assuring them that this met the approval of the profession of the United States, the Heads of Departments and the President of the Senate had lent their names as patrons. And I assured them that they would receive as

cordial a reception at that Congress as the American profession knew how to give. I would guarantee that they would be met by the intelligent part of the profession of every State in this Union from the Atlantic to the Pacific, and I cordially invited them to come. They received my invitation with the greatest degree of enthusiasm, and after a few remarks from Dr. Pancoast and others, which simply endorsed what I had said, they voted us their thanks, and accepted our invitation to meet us in Congress in 1887. Among some of the most prominent men in London and the Provinces there is a warm zeal for attending the Congress. Three or four Americans have been on the Continent for some time and report that in France there is a genuine enthusiasm for attending the Congress. In France they do not pay the slightest attention to any differences we have, and just as far as they imagine there is coldness in England or Germany, the Frenchman comes with the more enthusiasm to make it up.

Professor W. E. Casselberry read a paper entitled

PHARYNGEAL AND NASAL SURGERY BY THE GALVANO-CAUTERY; WITH REPORT OF CASES AND EXHIBITION OF APPARATUS.

New methods of utilizing the galvano-cautery are constantly being devised and recent improvements in batteries and electrodes, and the introduction of the local anæsthetic, cocaine, have materially extended its field of usefulness. In nasal, pharyngeal, and even in laryngeal surgery, its utility is particularly manifest. Pathological conditions of the upper respiratory passages, which have long baffled the most skilful therapeutics, are now effectually remedied through the medium of this agent.

Case 1.—Folliculous pharyngitis with hypertrophy in the angles of the pharynx. Dr. —— has suffered from fulness, soreness, and pain in the pharyngeal region, culminating frequently in acute pharyngitis with extension of the inflammation to the middle ear. Examination disclosed two enormous hypertrophied follicular masses, occupying the latero-posterior angles of the pharynx, each about three-fourths of an inch in length, of the thickness of a lead-pencil, and jutting inward and forward from behind the corresponding posterior pillar. In the normal state a whole chain of muco-lymphoid follicles ranges along in this location, and it is the hypertrophy of this entire row of glands on each side which is the chief feature in the case.

Treatment.—For the purpose of destroying these growths by the galvano-cautery, an electrode was extemporized by uncoiling the wire end of a Fleming moxa-electrode, thus converting the coil into an elongated loop. This was so curved as to accurately approximate the mass. The loop heated instantly to a white heat by the action of the battery, produced its slough with but little pain and no hæmorrhage. After several operations, performed at proper intervals, the growths were entirely removed.

Case 2.—Folliculous naso-pharyngitis or adenoid vegetations at the vault of the pharynx. Operations by the galvano-cautery écraseur. The symptoms were those of post-nasal catarrh. Examination, in addition to morbid conditions of other parts, revealed numerous hypertrophied follicular masses—so-called adenoid vegetations covering and filling up the vault of the pharynx; some of these appeared in the rhinoscopic mirror as pendular, pear-shaped bodies, others were sessile, and still others had the appearance of several cock'scombs grown together.

Treatment.—Removal of the hypertrophied masses is the only satisfactory means of relief. This he first sought to accomplish with a Löwenberg cutting forceps, but the effort resulted unsatisfactorily. The cold snare and other methods were tried and abandoned, until finally he found that the object could be attained most easily and with the least pain and inconvenience to the patient by means of a galvano-cautery écraseur. He constructed an écraseur for the case by bending a fine pair of straight tubes, threaded with a platinum loop, to the proper curve to pass behind the velum palati and touch the hypertrophied mass. The naso-pharynx was sprayed with cocaine solution. Guided by the rhinoscopic image he introduced the écraseur and caused it to encircle one of the growths, then connecting the battery, the loop heated instantly to redness, was as rapidly wound in on the windlass, and the vegetation thus severed at its base. There was no pain, no hæmorrhage, and but little subsequent irritation. The operations were repeated weekly until the growths were entirely removed.

Case 3.—Malformation of the anterior pillars of the fauces. The symptoms were a sense of constriction in the pharynx, and snoring. The malformation discovered was of the anterior pillars, *i. e.*, of the palato-glossal folds. These originated properly in the velum, but increasing in breadth they covered a considerable portion of the inner surface of the tonsils, and then a part only of the fold continuing in the normal pathway forward to the side of the tongue, the larger portion swept *backwards* and incorporated itself with the posterior pillar, forming a thick band, which continued downward in the latero-posterior angle of the inferior-most portion of the pharynx.

Treatment.—The overgrowth of each tonsil, together with the portion of the anterior

pillar which covered it, was excised by means of the galvano-cautery écraseur, and at the same time the abnormal attachments of the anterior pillars to the pharyngeal wall were severed.

Case 4 —Membranous occlusion of the posterior nares. MR. E suffered from complete obstruction of the left nasal chamber, most violent headaches, vertigo, left-sided deafness and fetor of the breath. A tense membrane was found to cover the left choana almost completely, and another to partially occlude the right choana. These membranes were incised by the galvano-cautery knife-electrode, properly curved and introduced from behind. Complete relief of all symptoms. Certainly the galvano-cautery can be abused, and a word of caution is not unnecessary in this respect. Accurate diagnosis, precise indications for its use and a certain amount of skill on the part of the operator are essentials to its judicious employment. The Fleming battery has advantages over any other that he has seen, not the least of which is the arrangement by which the plates may be immersed and withdrawn from the fluid by means of a pedal easily manipulated by one foot.

DR. F. O. STOCKTON, in opening the discussion, said: I have listened with a great deal of pleasure this evening to the paper; the cases are all very interesting. It does not seem necessary to spoil an electrode in order to make one for a special case; it seems to me that the ordinary flat electrode, by simply bending it down, would answer the same purpose. The trouble is we must have new instruments for every case that comes up. Unfortunately all practicing physicians, many of them who understand the throat and nose, are not so situated that they can run into an instrument maker's establishment at any time and have an electrode made, and I think it is wise to keep down to the standard instruments which can be bought at any time and which are always at hand. Another point I would like to speak of is the idea that follicular pharyngitis and adenoid vegetations are one and the same thing. Some authors consider them the same and others do not. BOSWORTH, of New York, claims that follicular pharyngitis and adenoid vegetations are one and the same. The battery which DR. CASSELBERY shows is the one which I have used in my practice for three years. I have tried a number of others and found this one the most satisfactory. A short time ago I saw a modification of it which I think is a little better; it was devised by DR. SAJOUS, of Philadelphia, but it is not on the market at present. Many of our prominent writers have rather discouraged people from using the galvano-cautery, as they say it requires a great deal of skill, and knowledge, not only of the anatomy of the part we are working upon, but also of electricity and the management of instruments. DR. MORELL MACKENZIE, of London, makes that objection to the galvano-cautery; in fact, he says that all, or nearly all, the operations can be performed by simpler means. DR. COHEN, in his last work, also refers to the difficulty of managing it, but I think if they had used the instruments of to-day they would not have found that difficulty.

DR. H. T. GRADLE said: The doctor's paper is so complete there is nothing left for comment except to deviate from the subject and take excursions into neighboring parts. It has been mentioned that galvano-cautery is not absolutely necessary. That may be true as far as the pharynx is concerned, but in the nose it is not. It would be almost impossible to do the same work as steadily by any other instrument, on account of the excessive hæmorrhage that would occur; these cases are unmanageable except with the cautery, and in most instances we can obtain relief both of local symptoms and obstruction of the nose, as well as the nervous symptoms maintained by the excessive turgidity. The question was asked whether hypertrophy of the pharyngeal tonsil could be identified with follicular pharyngitis; I should say not. We may have one or the other, but the follicles in the disease called follicular pharyngitis are much below the level of the gland. I have often found the gland hypertrophied into a very solid mass of about the consistency of the tonsils. The hypertrophy may of course have any extent; it may be so slight as to leave room for doubt of its existence, while in other cases it is impossible to gain any view of the posterior choanæ. In such cases nothing can be thought of but operation. I have used the cautery in the form of a white-hot knife or hot snare for hypertrophy of the pharyngeal tonsil, but not satisfactorily. Where we have a distinctly pedunculated tumor it will do well enough to use the hot snare, but where the tonsil is hypertrophied into a solid mass, not at all movable with the probe, I have found very little success with the battery, except that its removal is not so painful as by other means. I have at last settled down on the method suggested by TRAUMAN, viz: a sharp curette, as sharp as the instrument-maker can make it, the shank of which is bent at an angle of 140°. The operation is a barbarous one as far as appearances go, because it requires force. There is pretty free hæmorrhage, but the pain is not very great. Unless the patient is pretty tolerant it is not easy to remove the entire tonsil in one sitting, but in children I have not had any greater difficulty in coaxing them to the second sitting than I had at first. The results are extremely satisfactory, especially in cases of ear disease entirely due to this trouble. I have had considerable experience with different forms of battery; the kind which

I should prefer and recommend is an accumulator, if a wire can be had from some electric light plant. I can speak well of the Mackintosh battery, but I prefer one in which the carbon plates are made of the electric light sticks. They are much harder than the ordinary carbon plates, and we can easily get a very large surface in the battery.

Dr. R. Tilley said: I have had some experience with the cautery and with batteries. I am now using the form of battery Dr. Gradle has referred to; I have the two cells attached so that I use them together, and have them so arranged that I can lift them up with a crank; they are thus very easily manipulated. I have used this battery for about 18 months, and it has always given me satisfaction. I would like to speak of a slight modification in the fluid which I have recently used; it consists in the use of bichromate of soda instead of bichromate of potash; the advantage is that when the fluid has been used for a considerable length of time, in using the potash there is always formed a large number of crystals in the bottom of the cell, which are very hard and require quite a little time to remove, and which are so closely connected with the cell that there is more or less danger of breaking the glass. In using soda instead of potash this does not occur; the compound thus formed is so soluble that no accumulation is formed at the bottom of the cell. I appreciate Dr. Stockton's remarks in regard to the increase in the number of instruments; I make all my own electrodes and use, practically, wire alone. I see no advantage in the knife over certain modifications of the wire. In operations in the post-nasal and pharyngeal regions, I almost always use the cautery to burn the tissues completely to the bone. The object that I have in view is to make a cicatricial tissue extending from the surface of the mucous membrane to the periosteum, so as to prevent that tumefaction which frequently occurs and fills up the nares. This tumefaction is quite remarkable sometimes and changes so readily that I have seen the anterior part or the turbinated bone swollen up, and a moment afterwards the swelling gone, so that there could not be any possible reason or justification for using the cautery from the appearance of the tissues at the moment. Yet when the patient lies down at night he finds the nose on the side on which he is lying so stuffed up that it is almost impossible to breathe. I have found that when the anterior part of the turbinated bone is burned well down to the bone that tumefaction rarely occurs afterwards. Then there is a necessity of looking after these burns, especially in the posterior regions. In the anterior aspect of the nose there is only a small amount of mucus coming over the part that is burned, and no difficulties follow cauterization; but when the burned area is situated far back the mucus flows over it and it not infrequently happens that unless the part is well attended to a certain amount of fungus growth develops in this region. I consider the after-treatment an important factor in cauterizations. I would like to say a word in regard to these adenoid growths in the posterior nares that Dr. Gradle has referred to. Dr. Trautmann, of Berlin, removes all these vegetations with a sharp spoon, and claims remarkable success. I have not seen anything like relatively the same number of cases in my practice that it would seem are met in practice in Berlin. I think adenoid growths are more rare in Chicago. With reference to their removal with the galvano-écraseur, I should certainly be disposed to think that the ordinary wire écraseur would be more efficient than the sharp curette, and I think it could be more easily manipulated and more of the growth taken off at one sitting than with the galvano-cautery.

Dr. W. E. Casselberry, in closing the discussion, said: There are some points on which I would like to add a few words of explanation. In reference to spoiling an electrode in order to make a single loop to treat a special case, I spoiled the moxa-electrode because it was an easier way to get the loop than to send to Philadelphia and have one made. As to the merits of the loop over a knife electrode, I think that in cauterizing the soft tissue, by taking a small elongated loop and pressing it into the part you get a slough produced by each parallel wire, and it produces a larger slough with less pain than can be obtained by the knife-electrode; the loop will sink further into the soft growth. If you use a plain knife-electrode the slough produced at once under the flat surface of the electrode prevents further effect from its caustic action. I have not only employed the small loop in this particular case, but have found it useful in cases of hypertrophy of the inferior turbinated body where it was necessary to cut off a large section by means of the knife or écraseur. By simply taking the elongated loop and pressing it against the body, a considerable slough is produced in the centre; after this has separated there remains an ulcer, and when the ulcer heals there is cicatricial tissue, which afterwards binds the body down. In regard to the multiplicity of instruments, of course the multiplying of useless instruments is to be deprecated, but I would call to mind the fact that a large portion of the advance of medical science during the last half century has been directly due to the invention of new and improved instruments and apparatus. If those who devised the microscope, the ophthalmoscope, the laryngoscope, etc., had been satisfied with the "standard instruments" already in the market, we would not now have those most important forms of apparatus. A new instrument should always receive attention,

and if it is a real improvement the inventor should be given due credit. The glandular structures of the vault of the pharynx out of which adenoid vegetations are formed, and the follicles of the oro-pharynx, may not be histologically identical, but they are very similar in structure; they are both lymphoid tissues, and both exhibit the same tendency to undergo the hypertrophic process and to form similar large masses which, if allowed to remain, produce morbid symptoms. I don't know that it is necessary to say anything more in regard to batteries; there are a great many in the market. I am favorably impressed with the one I use; it has never failed to work. Although it may be detrimental to have the plates remain in the fluid, I have an uncomfortable feeling when I know that my plates are being spoiled and the fluid used up faster than they need be. The Sajous battery spoken of is an improvement on the Fleming in this respect; the pedal is not so high from the floor. When one is operating, if he raises his foot to the height of eight inches, he is liable to throw himself out of balance and to lose his line of vision. The pedal of the Sajous battery is only about two or three inches from the floor, and it is unnecessary to raise the heel off the floor to work it, thus maintaining the balance of the body. The Sajous plates are also corrugated, thus giving the most surface to the least bulk. But unfortunately, the Sajous battery is not in the market. The one which DR. SAJOUS uses he had made to order, but I have no doubt that it will be put upon the market soon. The various methods of operating for adenoid vegetations have all the same end in view, that is, the removal of the vegetations. The sharp curette is a good method if the patient will stand the blood, increase of pain, and the length of the operation. In the case of children it is, I think, a rather difficult method, and requires considerable skill and fortitude on the part of the patient. The case I have related in this connection was a girl about fourteen years old. I first tried the forceps, but the pain in cutting off the adenoid vegetations was objected to very strenuously by the patient, and I was obliged to desist. Before I tried the hot snare I tried the cold snare, but I found that it took some time to draw up the steel wire and thus squeeze off the vegetation. After the adoption of the hot snare I had no difficulty. The mere introduction of the instrument caused no pain, and after getting it over the vegetation, in two seconds the growth was off, with but little pain and no hæmorrhage to frighten the patient. The treatment of hay-fever by the cautery method, I would like to discuss, but the lateness of the hour will not permit it.

EPIDEMICS AND CREMATION.

BY HUGO ERICHSEN, M. D.*

"The very witching time of night
When graveyards yawn, and hell itself breathes out
Contagion on this world."

—SHAKESPEARE.

If we are asked: "Can an epidemic of any kind be caused by emenations?" there is but one reply; the facts on record compel us to answer "yes."

DR. BUCK, in his excellent work on Hygiene, writes: "It is impossible for any one to say how long the materies morbi may continue to live under ground. If organic matter can be boiled and frozen without losing its vitality, and seeds 3,000 years old will sprout when planted, it would be hardihood to assert that the poison of cholera, or small-pox, or typhus may not for years lie dormant, but not dead, in the moist temperature of the grave."

DR. WHEELHOUSE, of Leeds, England, says: "Do we not shun, and that most wisely, the presence of those afflicted with infectious diseases as long as they remain amongst us; and yet, no sooner are they removed by death than we are content, with tender sympathy indeed, and most loving care, it is true (but with how much wisdom?) to lay them in the ground that they may slowly dissipate their terribly infectious gases through the soil, and saturating that, may thereby recharge the rains of heaven as they filter through it, with all their virulence and terrible power of reproduction in the systems of the living. I am not the thorough and entire believer in the disinfecting and depurating power of the soil that I once was, for terrible examples of its failure have, in my judgment, come under my notice."

Often the site of an old grave is used to make a new one, and in consequence earth is brought to light that is saturated with the effluvia of corpses of those who, perhaps, have died of some contagious or infectious disease. The crime that is committed by individuals when they bury persons deceased of such maladies, is pithily expressed by that champion of modern cremation SIR HENRY THOMPSON, who says: "Is it not indeed a social sin of no small magnitude to sow the seeds of disease and death broadcast, caring only to be certain that they cannot do much harm to our own generation?" But such is selfish human nature!

The first to show the connection between epidemics and the process of decomposition was PROF. PETTENKOFER, of Munich, Bavaria. He demonstrated that the presence of putrefying organic bodies, air, moisture and warmth,

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in a porous soil are the potent factors which originate and develop pestilential germs.

The great mortality, the severity, that attended in former times the appearance of epidemics in cities where graveyards were situated in the centre of a large population, illustrates the deadly influence which these God's acres have.

SAINT AUGUSTINE pointed to the fact that epidemics are caused by decomposing organic bodies.

FORESTUS reported many cases of malignant fever caused by the emanations of cadavers.

AMBROSE PARÉ, the renowned French surgeon, in 1562, demonstrated that a malignant (pestilential) fever, then raging in L'Agenois, was due to the putrid vapors arising from a neighboring well into which many dead bodies, soldiers fallen in battle, had been thrown.

RAULIN (Observ. de Med.) relates how the section of a corpse at Leicturm, in the plain of Armagnac, caused a frightful epidemic.

A terrible pestilence, which decimated especially the lower classes, was originated in Riorno (Auvergene) by the digging up of the ground of an old cemetery, done to beautify the city.

JEAN WOLF, who reported upon an epidemic of malignant fever in 1731, attributed it to putrefying animal remains.

In 1752 a man, who had died of small pox 30 years ago, was dug up in Chelwood, a village near London, England. He had been buried in an oaken coffin which, when taken up, was yet entire and could have been so removed from the grave. But because the grave-digger could not handle it properly, he got impatient and beat in the cover of the casket with his spade, whereupon immediately a mephitic smell arose that filled the air to some distance. The corpse, which was to be deposited in a vault, had been a person of consequence, and therefore not only the inhabitants of his native village attended the exhumation, but a good many people from neighboring places. But a few days after fourteen persons contracted small-pox, and within a short time the entire village was infected, only two individuals enjoying immunity because they had had the disease. Although the epidemic was of a light character, two persons died of it. All those in the surrounding villages who had been at the exhumation were also attacked by small-pox.

RIECKE adduces analogous cases and relates that the opening of a vault which contained a victim of small-pox was followed by the death of a workman and the infection of another person.

MARET is authority for the following statement: A fever, complicated by gastric and catarrhal disorders, was prevalent, in 1773, at Saulieu, Burgundy; but few of those it attacked died. This was in the latter part of February. On the third of March a corpulent body, a victim of the disease, was buried in the cathedral, and on the twentieth of April following, very near to the first, that of a woman who, in child-bed, had succumbed to the fever. MARET reports that when the coffin was lowered into the vault, the ropes slipped from the grasp of the men who held them; the coffin fell to the ground and broke; a putrid fluid, that filled the church with a most nauseating odor, oozed from it. Of 170 persons, who remained in the church from the time that the grave was opened until the conclusion of the ceremony, 149 were attacked by a malignant putrid fever which, bearing many of the characteristics of the prevalent fever, was undoubtedly the result of the vitiation of the church.

The City of Tacna, Peru, was yearly visited, at certain times, by a pernicious fever, which caused many deaths. The cemetery was in the centre of the city. Finally the dead were buried outside of the city limits, and the fever disappeared.

During the month of March, 1781, and the half year preceding it, an epidemic raged at Pasajes, Spain, which befell 127 persons, of which number 83 died. This epidemic was attributed to the poisonous vapors arising from the over-crowded vaults of the parish church.

TROUSSEAU mentions the case of a grave-digger who was attacked by small-pox soon after opening the grave of an individual who had died of that malady many years ago.

MR. COOPER charged an outbreak of small-pox, in Eyam, Derbyshire, England, to the excavation of an old cemetery.

A dispatch from Montreal, dated October 26, 1885, states that a grave-digger of St. Sulpice, named ROBITAILLE, made a grave next to where a man, who died from small-pox a month ago, was buried. At the time there was no small-pox in the village, but ROBITAILLE, some days after digging the grave, sickened, and finally died of small-pox, making it evident that he contracted the disease from the body of a man who had been buried for a month.

Recent scientific discoveries confirm the opinion, long held by persons endowed with common sense, that the germs of many infectious and contagious diseases retain their vitality, and the power to spread the respective malady, in the grave and the layers of earth surrounding it. By means of these germs, yellow fever, cholera, small-pox, splenic fever, scarlet fever, diphtheria, and other diseases belonging to the same category, can be communicated from the dead to the living, even years after burial. Concerning splenic fever, which can be transmitted from animal to man, the great French investigator and pathologist, LOUIS PASTEUR, says:

"Recently we discovered the characteristic germs in pits in which animals, dead of splenic fever (charbon), had been buried for twelve years, and their culture was as virulent as that from the blood of an animal recently dead. Anthracoid germs in the earth of pits in which animals have deen buried, are brought to the surface by earth-worms, and in this fact we may find the whole etiology of the disease, inasmuch as the animals swallow these germs with their food."

The British Medical Journal, in 1880, commented on PASTEUR'S great discovery as follows:

"PASTEUR'S recent researches on the etiology of 'charbon' shows that this earth-mould positively contains the specific germs which propagate the disease; and that the same specific germs are found within the intestines of the worms. The parasitic organism, or *bacteridium*, which, inoculated from a diseased to a healthy animal, propagates the specific disease, may be destroyed by putrefaction after burial. But, before this process has been completed, germs or spores may have been formed which will resist the putrefactive process for many years, and lie in a condition of latent life, like a grain of corn, or any flower-seed, ready to germinate, and communicate the specific disease. In a field in the Jura, where a diseased cow had been buried two years before at a depth of nearly seven feet, the surface earth not having been disturbed in the interval, PASTEUR found that the mould contained germs, which, introduced by inoculation into a guinea-pig, produced charbon, and death. Further, if a worm be taken from an infected spot, the earth in the alimentary canal of the worm contains these spores or germs of charbon, which, inoculated, propagate the disease, and the mould deposited on the surface by the worm, when dried into dust, is blown over the grass and plants on which the cattle feed, and may thus spread the disease. After various farming operations of tilling and harvest, PASTEUR has found the germs just over the graves of the diseased cattle, but not to any great distance. After rains, or morning dews, the germs of charbon, with a quantity of other germs, were found about the neighboring plants; and PASTEUR says that, in cemeteries, it is very possible that germs capable of propagating specific diseases of different kinds, quite harmless to the earth-worm, may be carried to the surface of the soil, ready to cause disease in the proper animals. The practical inferences in favor of cremation are so strong that, in PASTEUR'S words, they 'need not be enforced.'"

SIR T. SPENCER WELLS pointed out, in his paper read before the British Medical Association, in August, 1880, that the observations of DARWIN, "on the formation of mould," made more than forty years ago, when he was a young man, are curiously confirmatory of the conclusions of PASTEUR. In DARWIN'S paper, read at the Geological Society of London, in 1837, he proved that, in old pasture-land, every particle of the superficial layer of earth, overlying different kinds of subsoil, has passed through the intestines of earth-worms. The worms swallowed earthy matter, and, after separating the digestible or serviceable portion, they eject the remainder in little coils or heaps at the mouths of their burrows. In dry weather the worm descends to a considerable depth, and brings up to the surface the particles which it ejects. This agency of earth-worms is not so trivial as it might appear. By observation in different fields, MR. DARWIN proved, in one case, that a depth of more than three inches of this worm-mould had been accumulated in fifteen years; and, in another, that the earth-worms had covered a bed of marl with their mould, in eighteen years, to an average depth of thirteen inches.

PROFESSOR KLEBS, of Prague, Bohemia, discovered the bacteria of malarial fever. They were called by him bacilli malariæ. His discovery was verified by PROFESSOR TOMASSI CRUDELLI, of Rome, Italy.

DR. ROBERT KOCH, of the Imperial Sanitary Bureau, at Berlin, Germany, detected the bacillus tuberculosis; there is no doubt, to my mind, but that consumption can possibly be spread by the upturning of the soil of a grave containing the victim of tuberculosis.

The same gentleman, now professor in Berlin University, discovered the comma bacillus of cholera. He expressed his belief in its propagation in the grave, especially when the latter is moist.

HOULIER and FERUEL are responsible for the statement that, during the prevalence of the plague in Paris in the beginning of the 18th century, the disease lingered longest and was the most severe in the vicinity of the "cimetière de la Trinité."

The Detroit Evening News, of September 23, 1886, reports the following case in which diphtheria was contracted from a corpse:

"BLANCHE HUNT, a 12-year-old girl, died at Albion of malignant diphtheria last week. SOPHIE CALKINS, aged 13, died at Fair Haven, Vt., of the same disease, contracted the week before at Albion. There are no other cases in town, and these two girls are supposed to have taken the disease at the cemetery, where they went into the vault containing the remains of a woman sent there from abroad, who had died from what the physicians called black jaundice. It is believed her disease was really diphtheria."

As early as 1878, the Massachusetts State Board of Health—one of the best in the world—showed that diphtheria is originated and dif-

fused by the emanations of victims of that disease.

In 1875, the same high authority had reached similar conclusions regarding typhoid fever.

There is much evidence to show that cholera was repeatedly caused by the excavation of the graves of those who had died of the disease, and that it raged with special violence in the vicinity of cemeteries.

Dr. Sutherland attested the fact that cholera was unusually prevalent in the immediate neighborhood of London graveyards. This, however, need not astonish us when we consider that the soil of church yards in some of the poorer districts in London was raised two, three, or even four feet in a few years. The great prevalence of epidemic diseases in some parts of the city, finally led to the formation of the Epidemiological Society of London, under the presidency of Dr. Babington.

When the cholera visited London in 1854, Mr. Simon asserted that if the soil of the cemeteries, in which the plague stricken of 1665 were buried, would be upturned it would make the prevailing scourge more virulent. It was done in spite of his warning, and his prediction was verified.

In 1826, when cholera made its appearance in Egypt, the French government sent out medical officers to discover, if possible, its origin. It was traced to an old and disused cemetery at Kelioub, a village near Cairo.

The outbreak of cholera at Modena, Italy, in 1828, was shown by Professor Bianchi to be due to the upturning of the ground of burial-yards, in which victims of the plague had been inhumed 300 years before.

November 12, 1836, Niaulis, the adjutant of Otto the First, of Greece, was attacked by cholera, of which he finally died. The body was given in charge of three men, who also assisted at the post mortem examination. On the third day after the funeral of the adjutant, one of the men, Jacob Kuehnlein, 72 years of age, was taken ill, and died the following day. The autopsy proved the disease to be Asiatic cholera. Three days after Kuehnlein's burial, the second of the men who had guarded Miauls' remains, J. Stroehlein by name, aged 48, was stricken down by the cholera, to which he succumbed within two days.

Chanenburg (cholera, etc., Wuerzburg, 1874, p. 8,) gives it as his opinion that decomposition is favorable to the development of cholera-germs, which means the propagation of the comma bacillus.

The Italians do not only stand at the head of the cremation movement to-day, but they recognized the value of that sure and never-failing germicide—fire—as early as 1837; in that year thousands of the victims of the cholera epidemic, then raging in Italy, were burned on the seashore at Palermo.

The report of the London Board of Health for 1849 directs attention to the fact that the cholera was especially prevalent and fatal in the neighborhood of graveyards. This, however, need not cause us any surprise, as the London Athenæum, to this day one of the most reliable journals of the United Kingdom, states in 1850 that, during the prevalence of the scorge, 500 bodies, dead of cholera, were daily interred, in addition to those of other diseases.

Professor Jaccoud, of the faculty of medicine of the University of Paris, claims, in his "Pathologie Interne," that there are three ways of transmission of cholera, of which the third is by corpses.

An employee of the French marine hospital at Therapia, near Constantinople, was present at the autopsy of marshal Saint Armand, who had died of cholera, which was held in the amphiteatre of the institution. A few days after the man succumbed to a severe attack of *de choléra fondroyant*, which he had contracted at the post-mortem examination.

Dr. F. Bidlot, of Liege, Belgium, states that, in 1867, he was called to a robust cholera patient who, when asked about the cause of his illness, said that until noon he had worked at the grave of a person, dead of cholera, who had been buried very superficially since an exhumation was to take place; when the body was disinterred he was seized by an illness which soon proved to be cholera.

The following case was also reported by Dr. Bidlot. A nun, who had nursed cholera patients in a hospital, died of the dread disease in the summer of 1860. At 10:00 a. m. in the latter part of October she was exhumed. At four o'clock in the forenoon of the same day Dr. Bidlot was called to Dr. Romiée, who had attended the disinterment. He was found to be suffering from cholera, and declared that his illness was owing to his exposure to the emanations of the body dug up.

Trinity Church graveyard, at New York, was the center of very fatal prevalence of cholera at every visit of that pest from 1832 to 1854.

Dr. Rauch relates (intra-mural interments in populous cities, Chicago, 1886) how the cholera was spread in Burlington, Iowa, in 1850. Not a single death took place in the vicinity of the cemetery of the city, until twenty persons, deceased of cholera, had been interred therein; then one case after another occurred, till the epidemic became truly alarming.

In 1865, when a cholera epidemic invaded Paris, France, it raged with great virulence in the old quarter of Montmartre; in that part of the metropolis there was a vast burial-ground, from which toxic vapors were continually escaping. Of 5,000 victims of the epidemic, 1,800 belonged to this ancient community. The great mortality in this quarter of the city was,

no doubt, due to the presence of the overcrowded cemetery.

Dr. John Murray, Inspector-general of Hospitals in Bengal, India, wrote a book, in which he endeavored to determine whether or not cholera can be propagated by human remains. He declares emphatically (Propagation of Cholera, 1873, p. 216), that the body of a cholera patient, dead or alive, must be regarded as an agent of transmission of the disease; and adduces the sequent facts to prove his assertion. Several women, whose business it was to lay out corpses, had contracted cholera. In 1818 a man died of the dread disease; five fellow-men, who carried his body to the last resting-place, were taken down with cholera, and died in the night after the burial. Dr. Townsend reported that, in 1869, three men were commissioned by the police to carry a corpse to Dumwahi. The day following their arrival the cholera appeared in this city; and the first to die of the scourge were the three who had borne the corpse.

Cholera already threatens to invade our peaceful land. When it comes, shall we, in view of what has just been shown, bury its victims, saturate the earth with its specific germs, which, if the grave should ever be disturbed, may breed a terrible pestilence, if not during our lifetime, yet surely during that of our descendants? There can be but one answer: To secure ourselves against a repetition of epidemics, we must burn our dead; it is a duty that cannot be evaded, that we owe to all mankind, that, when sinned against, as it has been in the past, is revenged by the resulting visitation.

When the cases, above related, are taken into consideration, even the most vehement anti-cremationist cannot deny that the specific germs of infectious and contagious diseases are propagated by earth-burial, and that the only sure medium for their destruction is fire, for no disease germ can pass through the rosy heat of the crematory and survive to propagate its species.

The scientific world was lately startled by the gladsome news that Dr. Domingo Freire, a physician, of Rio de Janeiro, Brazil, had discovered the peculiar microbe of yellow fever. The blood of yellow fever patients swarms with these microbes (cryptococci), which, by inoculation, produce the disease in animals. Dr. Freire named the microbe cryptococcus xanthogenicus. He was aided in his labors, to detect the specific germ of yellow fever, which included microscopic and spectroscopic examinations as well as experiments on animals, by his able assistant, Senor Menezes Doria.

Dr. Freire also examined some soil from the cemetery of Jurujuba, where victims of the yellow jack (as we call this fever sometimes) lie interred. Some of this earth was dried and then placed in a cage which contained a guinea pig. Previously to the introduction of the earth, the blood of the animal was examined microscopically, and found to contain no bacteria of any kind. The animal became ill, and died within five days. When its tissues were examined after death, they were found to present all the characteristic changes which yellow fever brings about. The blood was full of cryptococci xanthogenici in various degrees of development. The urine was highly albuminous. The brain and the intestines were stained yellow by the infiltration of the coloring matter of the cryptococci. After this discovery, the doctor recommended that all victims of yellow fever be destroyed by fire, to prevent general infection. The Brazilian government (one of the most enlightened in the world) immediately ordered that a cremation furnace be built at Jurujuba, in which all those that die of yellow fever there must be incinerated.

The St. Louis Medical and Surgical Journal makes this very sensible suggestion regarding the disposition of the remains of those dying of yellow fever in our own United States. It says:

"From what we have learned from private sources, the resurrection of the bodies, during the winter months, of those who died of yellow fever, has done much to perpetuate this terrible disease in southern cities, until the warm weather has set in. Cremation obviates all possible harm that can come from the dead, and duty to the living demands that everything be done to destroy the possibility of propagating this and all contagious diseases that run so malignant a course."

Dr. J. F. A. Adams says:

"Dr. Joseph Akerly expressed the belief that Trinity churchyard had been an active cause of the yellow fever in New York in 1822, aggravating the malignity of the epidemic in its vicinity. This church was built in 1698, and the ground had been receiving the dead for one hundred and twenty-four years. Sometimes bodies were buried only eighteen inches below the surface, and it was impossible to dig without disturbing the remains. During the revolutionary war, this burial-ground had emitted pestilential odors, and, in 1781, Hessian soldiers were employed to cover the ground with a layer of earth two or three feet in depth. The ground was unusually offensive in 1882, and annoyed passengers on the surrounding streets, previous to the appearance of the yellow fever, in July. During the epidemic, the condition of this churchyard, and the virulence of the disease in its vicinity called for some active measures, and, on the night of September 22, Dr. Roosa covered the ground with fifty-two casks of quicklime, the stench being at the time so excessive as to cause several laborers to vomit. On the 25th and 26th of the same month, St.

Paul's churchyard, and the vaults of the north Dutch church, in William street; received the same treatment, these being likewise very offensive and foci of epidemics."

When the yellow fever raged in New Orleans in 1853, the death-rate in the fourth district (in which there were three large burial grounds) was 452 per 1,000 of the population.

Dr. Bryant, writing on yellow fever at Norfolk in 1855, regards cemeteries as a constant source of danger in an epidemic and urges the total forbidding of intra-mural or even near-by suburban cemeteries.

Sir Spencer Wells related a fact recently at a meeting of the Health Exhibition in London, England, which has a strong bearing on the source of epidemics and their annihilation by cremation. Some persons who had died of scarlet fever were interred in a country graveyard. Thirty years afterward, the cemetery was included in a neighboring garden, and the old graves dug up. Scarlet fever forthwith broke out in the rectory and parish, and no other probable source having been discovered, it is impossible to avoid the inference that the germs of scarlatinal infection can retain their vitality a third of a century.

Facts are more convincing than theories, therefore I will submit a few.

In epidemics individuals should be forced to allow their dead (unless they succumb to some disease other than the prevailing scourge) to be cremated. To stamp out a contagious or infectious malady, or to arrest its progress, incineration must be made general; its benefits are nil when confined to isolated cases. The individual must stand back, when the public health is in jeopardy.

Governments should not allow bodies to be introduced into their respective countries from an infected land, unless such bodies have been previously reduced to ashes.

Thousands of cases of malignant sickness, I have no doubt, could be prevented by the prompt introduction of cremation. Why not then introduce it? Simply because there is an unreasonable prejudice against the custom? It is ridiculous! Should any mere prejudice stand in the way of a sanitary reform? I leave it to your sound mind to decide the question. Mind you, I am not advocating obligatory incineration in times of peace, except in cases of infectious and contagious disease. I would rejoice to see it generally introduced; but not by force. Cremation, moreover, needs not the aid of the sword or law; it will find its way unassisted.

Besides human and animal remains, I think all garbage should be destroyed by fire.

Incineration in war time should also be obligatory—must be so in fact. Cremation in portable furnaces is out of the question; I think Creteur's method would be the best. By this means several hundred bodies could be destroyed at once. There ought to be a cremation corps in every division of an army. They might be called members of the Society of the Black Cross, and might wear such an emblem on their caps and around the left arm. They ought to be neutral. There ought to be a society of the Black Cross, to dispose of the dead, as there is a society of the Red Cross to take care of the wounded. After a battle the various corps of the Black Cross Society would, then, begin their work, gathering the dead and committing them to the flames. Thus we would protect our brave soldiers, who offer up their lives on the battlefield for our sake, and for their beloved country.

From the fact that incineration was generally resorted to after great battles it appears probable that it was originally adopted on sanitary grounds.

DRY CHLORIDE OF SODIUM IN THE TREATMENT OF SUBINVOLUTION OF THE UTERUS.

BY HAL C. WYMAN, M. D., SURGEON WEST END DISPENSARY, DETROIT, MICH.

That peculiar enlargement of the uterus, with its accompanying train of distressing symptoms known as subinvolution of the uterus, is a matter of such common occurrence and is so often difficult to cure that anyone who has anything promising to offer, in the way of treatment, may be excused for enlarging existing literature on the subject. The writer desires here to commend most highly the surgical treatment of the disease.

The various plastic operations upon the uterine cervix which have been recommended by authorities he has found sufficient to compass a cure in the large majority of cases; but in those cases where for any reason operative surgical measures are withdrawn advisably, he has found the treatment by dry applications of sodium chloride to the swollen cervix most satisfactory. It has been in use in my practice for more than two years, and the success which has attended its use where I have applied it myself or directed its use in consultation, has been most pleasing.

The formula I use is this:

℞ Chloride of sodium, ʒ j;
Powd. slippery elm bark, ʒ iij;
Powd. hyoscyamus leaves, ʒ j.

Mix and rub in a hot and dry mortar until thoroughly desiccated.

This is applied to a diseased cervix uteri in quantities equal to an ordinary teaspoonful once every other day, and sometimes oftener.

My common plan is to take a piece of absorbent cotton, circular, and three inches in diameter, just thick enough to hold the powder

placed inside. The edges of the cotton are then folded over the powder and tied with a string which is left of a length suitable to facilitate the withdrawal of the tampon thus made, from the vagina. This insures the contact of the dry salt with the diseased uterus pretty nearly, although a thin layer of absorbdnt cotton intervenes between the salt to be dissolved and the uterus to provide the fluid for dissolving it. In case the application proves painful, the tampon is withdrawn, and another replaced containing a larger quantity of hyoscyamus or opium, or morphine, as I may think best adapted to the case. To apply the chloride of sodium prepared in the manner just described, a speculum is first introduced and the swollen cervix brought into view and proper position, then that end of the cotton tampon which contains the chloride of sodium, etc., is passed through the speculum and placed against the cervix. It is held in position with dressing forceps while the speculum is withdrawn. The tufted end of the tampon insures its contact with the cervix after the forceps are released.

The principle on which the influence of this remedy depends is found in: (*a*) The depletion of the uterus of its fluid to liquify the chloride of sodium. (*b*) The antiseptic properties of the salt checking and preventing putrefactive and fermentative changes in the vagina and uterus. (*c*) The presence of a mechanical support for the enlarged and malposed uterus favoring better circulation of blood through that organ.

In occasional cases I have observed that the patient did poorly when cotton was used to hold the powder in position. It appearing that the mere presence of the cotton adding to the bulk of the foreign body in the vagina was cause sufficient to make the patient listless and decline in health. In such cases I have introduced a small Ferguson speculum, brought the uterus into position, and thrown a teaspoonful of the powder directly upon the diseased organ. To relieve pain, I have added opium powder, hyoscyamus powder, or belladonna powder, to the salt and slippery elm.

The Southern California Practitioner exposes a trick which they play at Los Angeles. Any one can go to that city and return home with his heart made glad with a bottleful of tænia. The worms are said to be very pretty and lifelike, and it requires close inspection to discover the fact that they are made of celluloid.

Jequirity? Oh, yes, that was a bean introduced some two years ago, as a remedy for trachoma. Has anyone heard of it lately, or has it lapsed into innocuous desuetude.

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Editorial.

IS TETANUS INFECTIOUS? IS IT DERIVED FROM THE HORSE?

That prince of surgeons, M. Verneuill, Surgeon to the Hopital de la Petié in Paris, has written a learned article in which he has used the great wealth of his ability as a discriminator and differentiator of the problems of disease, in favor of the doctrine that tetanus comes from the horse. He tells us that the horse first gets or rather has the disease, and that noble animal then scatters the germs broadcast, where they lie for years, dormant, until some wounded human being provides the pabulum necessary for their growth. Then tetanus, with its trismus and opisthotonus, develops and destroys. He leaves us in ignorance as to how the horse got the disease, but tells us of the wonderful vitality of the germs, and repeats what Pasteur has shown to be true about the length of time the germs of anthrax and of pleuro-pneumonia may lie covered by the soil where they have been dropped by some diseased animal and are finally turned up by the plow and infect healthy animals with those diseases. Those germs have often been known to preserve their infecting properties for five years after they had been deposited in the soil.

We admire the ingenuity and facility of resource with which M. Verneuill defined his proposition to the Revue le Sciences Medicale, but we wonder how he is going to explain the fact that tetanus is found in localities the horse has never visited. It may be that he assumes that the germs were deposited by a tetanic horse in the clothing of the man who received the wound. If all the eminent gentleman claims be true, our soldiers will be exposed to a new danger in time of war from infected bullets. What if our enemies, the Mexicans, who have more horses than soldiers, should learn of M. Verneuill's discovery and order all their old, jaded out and tetanized horses to duty in the ammunition factories, where the tetanus germs would easily mingle with the cartridges and render the balls doubly dangerous! Secretary Bayard should send a Bac-

teriologist as special envoy to investigate this matter before he allows his diplomatic correspondence to assume a belligerent tone.

That biblical picture of Job's war horse, pawing in the valley and snorting fire from his nostrils, is what M. VERNEUILL may have had in mind, trying to give some rational explanation of the phenomenon, when this tetanus idea came to him. It is a very pretty custom the old French surgeons have, as their judgment ripens with age, of devoting their leisure to literary and social studies. Ricord, Dupuytren and others solaced their declining years with studies from the book of Job. They surmised that good man's affiictions were due to syphilis and it is not strange that there should be learned men in France to-day who would argue that his horse had tetanus.

THE ASYLUM VS. THE HOME-TREATMENT OF THE INSANE.

The number of insane is increasing so rapidly that it is a serious question to find asylum accommodation for them. Asylum physicians have, doctor-like, urged that their patients be sent to them earlier, and, when their cases have terminated unfavorably, have intimated that results would have been different had they been called in time. This has helped to crowd the asylums. Some very good physicians are opposed to sending their insane patients to institutions, because they find that better results are to be obtained by home treatment and the systematic use of medicine, for the purpose of overcoming the pathological condition which disturbs the mind.

In many States the asylums are crowded by the friends of political parties, without regard to the professional qualifications of officers. This has had a bad influence in some cases, because it has lowered the salaries paid to officers. When the salary of an asylum superintendent has been reduced to a figure that would take the hand of providence out of the call of a country clergyman, one may rest assured that such an asylum will have a superintendent who will have very little and very poor skill with which to treat the pathological side of his patients. He may be a good man to keep buildings and fences in repair, but he will be a poor doctor at the bedside. Good physicians command good incomes in private practice where opportunities are favorable, and are not likely to be found in asylums where salaries are small.

To answer the question, should physicians generally encourage their insane patients to enter asylums? one must first ask, what do those institutions do for the insane? Suppose we grant that they cure some cases that cannot be cured in any other way, do those who have been cured carry a burden through life? Is their odium attached to one who has been treated in an asylum? This must be answered in the affirmative. A young man who has been in a lunatic asylum, no matter how soundly he may have been cured, will not find employment as readily as one who has never been in an asylum, all other things being equal. The young woman who has been there will not find a lover as readily as her sister who has had her infirmities treated at home.

Does the treatment which the asylum physicians give their patients, cure a larger number of cases than of all kinds that are cured by private medical men outside of asylums?

Is there anything special or particular in the treatment prescribed by asylum physicians which could not be practiced just as well by medical men outside of asylums?

We think not. The fact that the asylum doctor often has a larger number of cases on his hands than he has time to attend to properly, makes it more than likely that many of his patients would be cured if they could only get out of the asylum, where they could receive the best medical care.

A KIND WORD FOR THE MICROBE.

The American Practitioner and News, in an article under this heading, stands up for a much-abused creature in a manner which does credit to its (the journal's) heart. Unquestionably the microbe craze has been excessive, altogether too much importance being attached to the presence of bacteria, bacilli, micrococci, *et id genus omne*, and our contempory's plea for them is very timely. "We will not deny," it it says, "that a few of them have gone astray. When they engage in the production of typhoid fever, small-pox, measles, and a dozen other uncomfortable visitations for mankind, they must certainly expect a large measure of resentment; they have certainly laid themselves open to the charge of having violated the statutes in such cases made and provided. But have they not something to plead in abatement? Most assuredly. If it were not for them there would not be any mankind. For instance, their action is held to be essential to the decay of wood—there are said to be about 1,000 species of fungi destructive to wood. If this be true, the lesson is clear. All the trees that ever grew would be standing to-day, living, or maybe dead, but as sound and firm as when they ceased to grow. Not a foot for a potato-patch, not a square rod of open ground for a cornfield, would any where be left. Maybe living, did we say? Hardly. For the leaves and the flowers would have been heaped up to the tops of the branches, and all life must have been choked or smothered out of them ages ago.

The only possible chance of getting rid of plants and trees, in the absence of microbes, would have been the use of fire. But this would have left the soil without mold, so that no satisfactory crops would have been grown to furnish food. In such a forest man would have perished long before he would have reached the opossum era of evolution in the Darwinian genealogy.

Then, with all the fuss we make, what kind of water would we have to drink if it were not for the microbes? What kind of water would Cincinnati and Pittsburgh send us, if it were not for the microbes purifying the river? We were accustomed to hear, in childhood, that water that had passed over three pebbles was always pure; but we have come to the conclusion that we had rather have three healthy microbes with populating tendencies than a cart-load of pebbles to purify our drinking-water. And similarly with the wells. They are full of ptomaines, poisonous, no doubt, as need be; but then when microbes come at their own expense to decompose the filth and purify the water, we need not for that reason go spy-them out with our eye-glasses, and trying to have them indicted jointly and severally as the most wicked of conspirators, and condemned to be hydrargyrized, chloridized, and sublimated without benefit of clergy. No, indeed! Microbes here, as in so many other relations, are onr best friends, and when we come to have properly enlightened law-makers, it will doubtless be made a penal offense to destroy them during breeding season."

Notes.

Most of the students who attended the Michigan College of Medicine, before its amalgamation, will remember PLUNKETT, and a few will recall RENNIE. These gentlemen are now peripatetic, polypathic physicians, and we have been favored with one of their circulars headed with PLUNKETT'S picture, in which they tell us what "polypathic" means: "Poly is derived from the Greek word which indicates many, and pathy is the root of the word to which we have affixed homeo, allo, electro, hydro, etc. Therefore, to be a polypath you must graduate in all schools of medicine, and the doctors are always pleased to show that they hold these diplomas." We are very sorry, indeed, that our old friend PLUNKETT has been driven into quackery. He always seemed an honest, well-meaning fellow, and we will not judge him harshly for what he, probably, could not help.

A French journal contains an account of a physician who on being called to attend an accouchement demanded a fee of 250 francs. The husband being a poor man could raise only 100 but in spite of his promise to make up the balance as soon as he could save it from his wages, the physisian refused to accompany. During the delay in securing another physician the woman died undelivered. Well, although the study and practice of medicine are, doubtless, humanizing, there are some brutish natures who are proof against these influences. The proper place for such practitioners is out in the free-and easy West. Could any one imagine such an occurrence as the above in our glorious west? It certainly would not happen twice during the natural life of the doctor.

It is gravely asserted, by the Medical Record, that DR. PANCOAST, of Philadelphia, has invited QUEEN VICTORIA to attend the meeting of the International Medical Congress in Washington next year. It would be a mighty good card to have her come, and the idea is worthy of the Yankee's ingenuity. We haven't heard whether she can arrange things at home so as to let her get away, but we hope she may be able to.

Free dispensaries are almost unknown in France, there being only three in Paris, according to the correspondent of the Providence Medical Journal. Alas for the rarity of medical charity (?) in wicked France! It is in America that the poor man may have his physical disturbances attended to without money and without price, and here, too, an occasional well-to-do citizen is the recipient of the best of medical treatment, on the same terms.

The female drug clerk, at first so popular out in Kansas, is said to be becoming unpopular. When the Kansan winks at her across a soda fountain, she does not know whether to put a little balm of Gilead in his soda or to hang her head and blush.

Medicine is more successful than faith, as a curative agent, because it has the inside track.

Book Notices.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF MEDICINE; designed for the use of Practioners and Students of Medicine, by Austin M. Flint, M. D., LL. D. Late Professor of the Principles and Practice of Medicine, and of Clinical Medicine, in the Bellevue Hospital Medical College, New York, etc. Sixth Edition, revised and largely rewritten by the author. Assisted by William H. Welch. M. D., Professor of Pathology in Johns Hopkins University, Baltimore, and Austin Flint, M. D., LL. D., Professor of Physiology in the Belvue Hospital Medical College, New York.

Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

This is the title page of the sixth edition of FLINT'S Practice of Medicine, as the work has properly been called ever since the appearance of the first edition, in 1866. The major portion of the revision and rewriting which distinguishes this edition from the last edition was done under the lamented FLINT'S own eye and hand. Those parts of the work which treat of the history of tubercle and of tuberculosis, received his especial care, and when we read the results of KOCH'S studies, and his discovery of the tubercle bacillus, and find them approved by the distinguished author, we feel that whatever of doubt as to the truth of KOCH'S affirmations may have been entertained, it has been entirely dispelled by the dictum of America's greatest pathologist and physician.

The mere fact that AUSTIN FLINT, in this work, says that "the infectiousness of tubercle is proven," will do more to prevent the spread of consumption than all that has been said and done by all the medical writers who have preceded him. This acknowledgment on his part of what has long been a disputed question, is a "confirmation strong as word of holy writ" to the great mass of medical men throughout the entire civilized world, and those men will preach the prevention of tubercle infection. They will discover and use means to destroy the infecting bacillus before it has had time to destroy the lungs or other organs which it may infest. In every part of this edition may be found evidences of the great improvement that has taken place in our art during the last six years. The discoveries in physiology, chemistry, hygiene, etc., have all been analyzed and considered by the author, and adapted to the minds of the general practitioner of medicine. A discovery in pathology is discussed in the light of its usefulness as an item of knowledge in the treatment of disease, and not as an idle and useless *lusus naturæ*, having no bearing on the practical side of life. The seductive quality of FLINT'S pathology has often been remarked, and is due to the fact that it is, in the main, correct. It is always consistent, and is set forth in a way that at once suggests its value as an index to remedial measures.

Under the title, localization of cerebral diseases, the topical diagnosis of cerebral lesion is discussed. Nothing is said upon this subject that has not been ascertained to be true beyond any doubt or question. The fact that there are two different qualities of knowledge bearing upon this matter, has been nicely handled. The physiological sources of knowledge derived from experiment on lower animals are much more positive in their nature than the pathological sources of knowledge derived from observation of diseased men during life and a careful study of the lesions found in their nervous systems after death. Depending upon the former for data upon which to base a diagnosis in men, would often lead to errors that might prove serious, but when such knowledge is only used after it has been carefully weighed in connection with information derived from the latter sources, the patient is pretty sure to profit by the results. A great deal of good must come to the profession from the singularly forceful way the author has set forth his ideas upon the various diseases considered in the work. This nature in the knowledge it contains must prove a monument more lasting than one of brick or stone to the memory of one who, for more than fifty years, observed and studied, and constantly wrote about the various diseases which effect the human family. The author's experience was a singularly rich one, embracing the history of disease as it is observed in the rural districts, as well as the cities of the north and south, of the east and west. People of all trades and professions, rich and poor, were his patients, and added to the bulk of his knowledge.

LEA BROTHERS & Co., Philadelphia, are the publishers. The quality of their work is so uniformly good that it is a waste of time to mention the details, paper, type, binding, all being of the best quality, and in perfect harmony with the enduring character of the subject matter or thought.

RHEUMATISM, ITS NATURE, ITS PATHOLOGY AND ITS SUCCESSFUL Treatment. By T. J. Maclagan, M. D. New York: Wm. Wood & Co.

The title of this book (the September volume of WOOD'S Library) is sufficiently odd to arrest attention. It is odd in that it intimates that a disease for which "six weeks" has come to be very generally regarded as the best remedy, may be cut short by medicine, and in that the author is simply an M. D.—only that and nothing more. How it happened that a physician who is not a professor in several schools, physician to numerous hospitals and member of various societies had the temerity to write a book will excite general curiosity. But it is possible that the author in the present instance is a professor, hospital physician and member of societies. If so the curiosity is but intensified by the fact that he could refrain from appending all his titles to his patronymic.

DR. MACLAGAN was the first, in 1876, to introduce salicin to the notice of the profession, as a remedy for rheumatism. The present book is a systematic treatise on the disease in all its forms and manifestations, and on its treatment by the salicyl compounds. The miasmatic theory of rheumatism is also elaborated, and an explanation is offered of the manner in which the salicyl compounds produce their recognized results. It is a full and complete consideration of the subject.

Medical Progress.

THE SUBIODIDE OF BISMUTH IN THE TREATMENT OF ULCERATIONS.—In 1876, while resident physician in the Presbyterian Hospital of Philadelphia, I devoted considerable time and attention to the study and treatment of wounds and ulcerations, and to experiments directed to the modification of the tegumental tissues in repair, to obtain, if possible, more rapid and more normal cutification or cicatrization than was common.

Having been granted unusual facilities to pursue these studies during my service, I was enabled to have constantly under my care and observation a great variety of chronic ulcerations.

Skin grafting was then fashionable, iodoform was the popular dry dressing, and subnitrate of bismuth was in common use.

Among a number of new preparations sent to the hospital for trial, with no claims for therapeutic value, was the "subiodide of bismuth," made by R. A. FAIRTHORN, an experimental chemist of Philadelphia at that time.

The chemical affinities of the new salt with the subnitrate and iodoform, suggested its use for its supposed alterative and sedative properties. It was at once seen that it not only met my expectations, but that its action in some unexplained way was simply marvellous. Ulcers which had previously defied all treatment, seemed to yield at once to its influence.

In the face of my evident successes, it was said that either my cases were "easy ones," or that the coincident treatment and favorable able surroundings were the secret of success.

As a test case, an inmate of the Philadelphia Hospital who had an ulcer that had resisted all treatment for over ten years, and who had finally been pronounced incurable, was, by permission, transferred to the Presbyterian Hospital for treatment. His was the worst case of atrophic ulcer I have ever seen; the leg was little but skin and bone, and looked as if a few hours might make it an elegant dry specimen for the museum. Under the use of the subiodide of bismuth alone, he was returned cured in three weeks.

The subiodide was then introduced into the Philadelphia Hospital, and received the highest praise; but its use was discontinued shortly afterward because it was "too expensive."

The new preparation never became popular; no therapeutic claims were ever made for it so far as I know; it was not generally introduced, and its manufacture was stopped soon after.

Personally I have continued its use for chronic ulcerations during the past ten years, and of late have discovered such additional properties as will make it a valuable addition to the materia medica, and the armamentarium of the surgeon. It will control inflammation, allay irritation, suppress suppuration, promote granulation, and induce cicatrization. It has been found to be almost a specific in gonorrhœa, in various septic and specific mucous inflammations, oral and nasal catarrhs, ophthalmias, etc., in chancroids, rectal ulcers, etc., and in the various cachectic and dyscrasic ulcerations.

Internally it is strongly recommended in gastric ulcer, gastritis, and in typhoid fever.

Its therapeutic and physical properties may be summarized as follows:

a. It subdues the inflammatory process.

b. It substitutes the inflammatory regeneration of tissue with a neoplastic force, which closely simulates normal embryonic histogenesis.

c. It is, by its action, *a vital aseptic.*

d. It prevents the formation of pus.

e. It lessens direct and reflex irritability.

f. It is so bland and unirritating that it can be used on any surface.

The subiodide of bismuth, by virtue of these properties, is almost a specific for ulceration.

There are certain kinds and conditions of acute and chronic ulceration which may require special treatment, preliminary to or coincident with the use of the subiodide of bismuth.

The asthenic or œdematous ulcer; the congested, the inflamed, the irritable, and the readily bleeding ulcer; the ulcer with exuberant or fungous granulations; the cachectic, the varicose, the phagedenic, and sloughing ulcer; the ulcer with callous edges; the eczematous, syphilitic, scorbutic, scrofulous, lupoid, and cancerous ulcerations: all may require some radical or specific treatment to convert them to a simple form of ulcer, or to remove pathological elements which would retard or impair healthy tissue formation.

Particularly should attention be directed toward restoring a normal condition of the cutis and its accessories. Varices may be compressed or obliterated by other means; œdema, congestion, or inflammation controlled by position and rest; nodules of specific character, as in lupus, rodent ulcer, etc., ablated with caustic potassa; the irritable ulcer allayed with chloral; the errhytic or readily bleeding ulcer blanched with a five-per-cent. powder of salicylic acid; exuberant granulations resolved with bromide of potassium; the callous edges cut down with salicylic acid or the knife; phagedena and slough controlled with caustics or chlorine; the atonic bases of syphilitic ulcers stimulated with nascent iodide of mercury, etc. These or other accessories may be required, but in a great majority of cases the subiodide of bismuth alone will prove sufficient.

The action of subiodide of bismuth on an ulcerating surface is presumably as follows: Iodine acts upon granulation tissues, inducing an increase of all normal physiological processes (SCHEDE, Arch. f. klin. Chir., 1882, xv. p. 14); it produces a protoplasmic energy ordinarily obtained only by congestion, hyperæmia, or inflammation, and induces a reversion of the tissues to an embryonic state. It imparts a formative impulse or force to the cellular elements of the three germinal or blastodermic layers and their derivatives, which closely approximates to the laws of normal development. Its specific action as an alterative in certain dyscrasiæ is also a valuable factor. Iodine ranks high as an antiseptic agent, having power to inhibit germ development, being efficient in the proportion (minimum) of 1 to 4,000.*

The bismuth unites with the albumen, forming an albuminate, which acts as a sedative, aseptic, impermeable coating on the granula-

*STERNBERG, table, American Journal of the Medical Sciences, April, 1883.

tions; retarding evaporation of the cellular moisture; modifying the formation of striated connective tissue from the gelatinous intercellular substance, and preventing the retrograde metamorphosis of the white blood-corpuscles. Its oxygen may play some chemico-vital part in the process, possibly in its nascent state as an aseptic.

They simply oxidize the deodorized pus, rendering it an unfit soil for septic germs, and possibly feed the struggling tissues enough oxygen to promote granulation.

Under the use of the subiodide of bismuth ulcers, which usually heal by cicatrization at the rate of one-half to one line per day, have been seen to dermatize at the rate of three to five lines per day. The cicatrix is fleshy and firm, and is but little disposed to destructive inflammations or subsequent alterations, even over syphilitic sores.

The shape of the ulcer seems to be no obstacle to the process of cutification, circular healing as rapidly as linear or oval ulcers.

The formative force does not seem to diminish as the centre is approached, thus differing from common healing, and indicating that the process is not one especially of stimulation, but a truly regenerative force imparted to the tissue element. Surfaces denuded by gaping after division of cicatrices will rapidly heal under its use.

Its utility, in my observation, has in no instances been more forcibly shown than in cases of indolent ulcers, where, to save time, I have used it only on the centre of the sore while the edges were undergoing some preparatory treatment; active germination of the peripheral cutis having been observed to commence before the morbid epiderm began to show any improvement. The same phenomenon has been observed with skin grafts.

Subiodide of bismuth, then, in ulceration, appears to be, if not a true specific, at least a decided chemico-vital adjunct to tissue repair. By its manifest virtues and properties, and its entire freedom from any objectionable features, it will bear comparison with any therapeutic agent or system. Subnitrate of bismuth, iodoform, oxide of zinc, burnt alum, clay, "mineral earth," etc., have been lauded as perfect dry dressings. Each has its virtues, and each its faults.

Subnitrate of bismuth, from liberation of nitrous acid or from contamination with arsenic, is to some degree aseptic, but it is not free from danger by absorption, having been known to cause enteritis, nephritis, and gangrenous stomatitis.

Iodoform also is credited with numerous toxic sequences from absorption, and is objectionable on account of its odor.

In the subiodide of bismuth, we have a perfect dry dressing: it is bland, unirritating, and, if absorbed at all, has never yet proved injurious; it supports life, promotes nutrition, and maintains the integrity of the tissues—hence it is a *vital aseptic*. It is probably an "inhibitory antiseptic,"* being potent in holding in check the development of pathogenic germs by sterilization of the tissues and their discharges. It gives physiological rest by restoring the functional relations of cell life, and it makes the work of repair a passive process.

*Lister, British Medical Journal, Oct. 25, 1884, p. 804.

In the following description of its use I have followed the treatment of a bad case. In many cases I have known a single application entirely to heal ulcers that had long resisted treatment by other means.

My usual proceeding in a case of chronic leg ulcer is as follows: I first thoroughly wash and cleanse the face of the ulcer, removing all slough, shreds of tissue, foreign matter, etc. I then disinfect it well, generally with solution of acetate of aluminium, *q. v.*, and then dry the surface of the ulcer and the surrounding parts. The granulations are then dusted with, or the ulcer packed with the subiodide of bismuth, alone or in combination, or with whatever powder may be indicated by the exigencies of the case. Calomel, salicylic acid, and bromide of potassium, I have found very useful. I then, while holding the limb vertically to drain it (the patient on his back), firmly strap it with adhesive plaster from below upward. The straps should be about one inch wide, and are applied as a spica, nearly surrounding the leg, and extending an inch or more above and below any œdematous or congested part. A firm bandage is then applied, including the foot, and the patient is allowed to go about as usual. This dressing, according to circumstances, may be allowed to remain from one to four days, and it may or may not need renewal.

When in proper condition—that is, when the ulcer has assumed a healthy aspect—the remainder of the treatment is simply to dust the granulations with the subiodide, protect with a Maltese cross or perforated square of plaster, cover with a thin layer of absorbent cotton, and again apply the bandage firmly.

These dressings should be renewed in from two to five days, when the limb may be gently rubbed to stimulate the circulation, or the patient may be allowed to stand or walk about for a few minutes without the bandage.

In removing the dressings I use no force to dislodge any of the powder which may have dried on the surface or about the edges; but I generally douche the granulations with diluted alcohol or the solution of acetate of aluminium.* In some cases the ulcer is not washed at all from the beginning to the end of treatment, any moisture or discharge being lightly sopped off with absorbent cotton.

If the surrounding skin shows any irritation from the plaster or from pressure, I dust the part with the subiodide and smear the surface with Goulard's cerate.

Strapping and bandaging, as used by me, are simply valuable adjuncts to secure physical rest to the parts; on other parts of the body pressure is seldom required.

In gaping wounds with no loss of tissue, after drying and dusting with the subiodide, I use the extraneous ligature; that is, the parts are approximated and held in position by lacing together the free edges of parallel strips of perforated or porous plaster. The edges of such wounds are generally covered with a strip of lint saturated with the compound tinc-

* Sol. acetate of aluminium:

℞ Alum sulph., gr. 198.
Plumbi acet., gr. 446.
Aq. ℥xvj.
Sol. aluminii acet., gr. x ad. ℥j—

the proper strength for use.

ture of benzoin. It is surprising how often by these means such wounds will heal by first intention.

In recent wounds and acute ulcerations, the dressing should be less frequent than in chronic cases.

Proper diagnosis of the individual characteristics of ulcers and specific therapeutics of special indications, will certainly influence the results; and these must depend upon the judgment of the surgeon.

If the subiodide of bismuth is used properly, the prognosis in every case may be "certain cure in half the time, and with far better results than can be obtained by any other treatment."

The prescription price of the subiodide of bismuth is from twenty to twenty-five cents per drachm, and as it is dusted on or used freely, it will require from a drachm to an ounce to effect a cure in an ordinary case of leg ulcer; so it is comparativly inexpensive.

Subiodide of bismuth has been used in the treatment of gonorrhœa with the greatest success. (Bis. subiod., gr. xx; glycerin et. aq. ää ʒ iv. as an injection.) I would suggest that it would do better used dry, if the urethra could be rendered patulous; or it may be used in the form of a soluble bougie.

It has been used successfully in rectal ulcerations (bis. subiod. ʒ, unguent, ʒ j), applied with an ointment syringe.

It is highly recommended for internal use (gr. v–x ad. glycerin ʒ j, t. i. d. or p. r. n.) in gastric ulcer, intestinal irritations, and in typhoid fever; for gastric ulcers or intestinal irritations it should precede food at least an hour.

Many other local and general uses of the new drug might be suggested; it has properties which deserve therapeutic investigation and application, and which should appeal to the profession for extended use.

I would be pleased to answer any inquiries regarding it, or to hear from any one of its use and results.

Until recently, the subiodide of bismuth has practically been out of the market. The original preparation was variable in color, and not entirely free from some irritating foreign substance in crystalline form.

The subiodide or oxyiodide of bismuth is produced, as an insoluble precipitate, in the reaction between KI and BiO, NO_3 in the presence of HCl. It is a heavy, amorphous, impalpable powder, of a bright red color, odorless and almost tasteless; it is neutral in reaction, and perfectly insoluble in water, alcohol, or ether. Sp. gr. 6.72. It contains, as its formula indicates, BiOI : Bi 208, O 16, I 127 parts in every 351, or an equivalent of nearly one grain of iodine in every three grains of the subiodide.—A. Sidney Reynolds, M. D., in *Medical News*, Oct. 9, 1886.

Antipyrine in Puerperal Fever.—In the New York Medical Journal, October 9, 1886, Dr. Paul F. Munde relates the results of his use of this remedy in puerperal fever. It has proved in his hands a most potent symptomatic remedy, free from danger in puerperal septicæmia:

The remarks made by several prominent obstetricians at the first meeting of the German Gynæcological Society in Munich last June, while discusing the treatment of puerperal fever, to the effect that they had abandoned antipyrine in that disease, because they saw no particular or lasting benefit from it, induce me to carry out an intention formed previous to that meeting to report my experience with that remedy in a number of cases of puerperal septicæmia and peritonitis during the past two years. During this time I chanced to see quite a number of such cases in consultation, in nearly all of which I recommended the use of antipyrine to reduce the temperature, and the result was such as to lead me to look on this remedy as a great boon, far superior as an antipyretic to quinine, aconite, or even cold, which agents have hitherto been our main-stays in reducing temperature. It would seem almost useless to say that all I expect from antipyrine is its temporary antipyretic effect, and that a permanent or curative influence is not looked for, did not the German obstetricians referred to make this want of permanency of the reduction of temperature one of their reasons for discarding it. But I cannot help thinking it a poor reason for not employing a remedy simply because its effect is less permanent than we might desire, when we have no better substitute at hand. In a disease like puerperal septicæmia it would seem to me that any remedy which affords even temporary relief should be eagerly grasped, since often so little can be done in this fearful malady.

While the measures recommended by the German obstetricians—the dull curette to remove decomposing remnants of placenta and coagula, intra-uterine irrigation, cold affusions, baths, and compresses, to reduce temperature, alcohol and nourishment to maintain strength—are also those employed by us, it is well known that irrigations have but an early and limited value, and that the application of cold to a large part of the body, especially after confinement, is dangerous, and may be followed by shock and collapse, not to mention the inconvenience of such applications. For these reasons, the practical and convenient ice-water coil has been introduced, which certainly, as an antipyretic, does all that can be expected from a measure applied to so limited an area of the body as the skin of the abdomen. But even from these heat-reducing methods only a temporary result is obtained, and they require more or less frequent repetition.

What more convenient, then, than the administration of antipyrine at times, at intervals, and in doses proportionate to the return and intensity of the fever? Of course, we know that the period of comparative apyrexia which soon follows the use of the remedy is but temporary, and that perhaps soon the temperature will rise to its former height, and the remedy require to be repeated, which alternative may occur again and again for many days. But, in the intervals of comfort and freedom from fever, the exhausted system has a chance to recuperate by sleep and by the accumulation of the vital forces which has been consumed by the fever, and we thus gain time to aid the system in throwing off the poison and weathering the disease. Surely this is not theory or fallacy, but can be and often has been demonstrated at the bedside.

What I have said applies equally to any inflammatory affection characterized by general

rise of temperature. But I do not know whether the administration of antipyrine during puerperal septicæmia or peritonitis has become so general as the use of the remedy in internal medicine. I, for my part, certainly feel that its careful, systematic, and persistent employment has had a large share in enabling a number of the patients with puerperal fever whom I have seen in consultation to survive the disease. In making this assertion I do not undervalue the ice-water coil, or the stimulants and nutrients which were crowded into the patients almost *ad nauseam*.

The manner of administering antipyrine as to dose, repetition, and vehicle, is, I think, of prime importance, if we would secure a rapid, satisfactory, and safe effect. To give it in large doses, say 20 to 30 grains, repeated every hour or two until 60 or 90 grains have been given, is, I am sure, exceedingly hazardous. The objection has been made that the reduction of temperature may be too rapid and intense, falling even below 98°, and that collapse may occur. This is perfectly true, and I once saw the temperature fall from 104° to 96·5° F. in a hospital case of pelvic peritonitis, after two doses of 20 grains each, within three hours.

In one consultation case last winter I could find nothing to account for the temperature of 102° but a comparatively small exudation in the left broad ligament, the size of which hardly seemed to account for the sharp collapse and small pulse of 120 beats. At a loss to comprehend the cause of the collapse, I continued my inquiries, with the result of ascertaining that the attending physician, the temperature having been 105°, had given 30 grains of antipyrine in one dose shortly before my arrival. Appropriate stimulation soon brought down the pulse and relieved the collapse.

I have always followed the rule never to begin with a larger dose than 20 grains (if the patient is strong), and to follow it up with 10- or 5-grain doses every half-hour or hour until 20 grains have been taken. Usually, and always if the patient's strength is below par, I begin with but 10 grains, and give 5 grains every half hour until 20 more have been taken, which will make 30 grains within a little over two hours. The pulse is carefully watched, and any sign of flagging means discontinuance of the antipyrine and the use of stimulants.

This same quantity or less is ordered to be repeated as soon as the temperature (taken in the mouth, rectum, or vagina) rises above 102°. Seldom have I found it necessary to order this quantity of 30 grains in divided doses to be given more than twice in the 24 hours; generally but once, usually toward evening. Once, however, for over two weeks, the patient's constantly recurring rise of temperature required the daily consumption of from 60 to 90 grains, until, finally, the temperature remained down, and recovery took place.

All the patients were under the care of trained nurses, who were carefully instructed to take the temperature and pulse at regular intervals, and administer the antipyrine in strict accordance with their instructions and the effect of each dose. As soon as the temperature fell below 101°, as a rule, the remedy was discontinued. In this manner I never saw the least sign of collapse or excessive reduction of temperature (in the case above referred to the house surgeon gave the antipyrine in my absence), and can report none but the happiest results from the drug.

It was given either in solution with syrup and water, five grains to the tablespoonful, or in gelatin capsules (my favorite form), or, if the stomach was irritable, by suppositories or enema, in both of which latter forms it acted admirably. In some cases I found it necessary to give it hypodermically, which was readily feasible, as it is very soluble, one grain being dissolved in one minim of water.

In addition to the antipyrine, I always had the ice-water coil applied when the temperature rose, and removed when it fell. And I often gave five-grain doses of quinine every three or four hours, if the stomach could bear it, merely for its tonic properties. But I feel convinced that the quinine had but a small, and the ice-water only a moderate, share in the recovery of the patients.

Out of the 28 cases of puerperal septicæmia (19) and puerperal peritonitis (9) which I have seen in consultation during the past two years, since I have been using antipyrine systematically in this disease, only three proved fatal, one of which developed chronic encysted peritonitis, to which the patient succumbed five weeks after delivery. Surely this is not a large proportion, especially when we consider that a consultant is not often called until the case becomes very serious, perhaps actually hopeless, and when I state that one of these patients was actually morbid when I saw her.

The third case I saw last April, and found absolutely intractable to remedies, each lull in the disease being speedily by fresh accession of septic infection more violent than the preceding one.

I do not deny that I always expect a more lasting effect from the antipyrine and other similar remedies in the cases where the local inflammation predominates than when no cause for the fever can be found by an examination of the pelvic organs. And yet it has seemed to me that in precisely those pure cases of septic infection with no apparent source has the antipyretic effect of antipyrine been most grateful and satisfactory.

I will not weary the reader by detailing cases which all present the same general features. Suffice it to state that the repeated daily use of antipyrine, once or oftener in the 24 hours, if the rise of temperature called for it, continued for days and even as long as three weeks, has, with proper precautions as to indications, doses, and mode of administration, proved in my hands a most potent symptomatic remedy, free from danger, in puerperal septicæmia.

THE USE OF NITRITE OF AMYL IN THE SEVERE PAROXYSMS OF WHOOPING-COUGH.—DR. MORRIS LEWIS in the Medical and Surgical Reporter, September 4, 1886, reports the following interesting case:

E. B., female, æt. 13 weeks; breast-fed; a well-formed, healthy baby; rather small, and weighing about 7½ pounds.

At the age of seven weeks, having just recovered from the effects of a perfectly normal vaccination, she contracted whooping-cough from her brother, whose case had been one of the lightest character, rendering the diagnosis impossible for over two weeks. The infant's

cough for the first week was slight; but during the second week it began to show characteristic symptoms.

The child was placed upon a mixture of belladonna and alum every three hours, and progressed favorably until the night of February 12, which was towards the end of the second week of the disease; it was then seized with a violent paroxysm of coughing, became purple in the face, and finally, according to the mother's statement, ceased to breathe. I was immediately sent for, but before I could answer the summons, the mother had thrust the child out of the window into the cool, damp air of a foggy night. This procedure was immediately followed by an inspiratory effort, and the child breathed again. When I arrived, the child was in an exhausted state, and was breathing regularly. After this until the 2d of the month, but one other slight attack of this nature occurred. By this time the child was coughing in a perfectly typical manner. The medicine was continued, but in slightly larger doses, the child taking about the one-twelfth grain of extract of belladonna in the 24 hours.

On the night of the 22d there were three severe paroxysms, during all of which I was present.

The child would awaken with a series of violent expiratory coughs, with scarcely an inspiratory effort between them. Finally, an expiratory spasm would occur, lasting fully 15 seconds, during which the child would struggle and become perfectly livid. This would be succeeded by complete collapse, with entire suspension of respiration, due probably to exhaustion of the respiratory centre.

During the last two of these attacks I administered ether by inhalation, and believe that thereby the spasmodic stage was somewhat shortened; but the subsequent collapse was so severe that I was obliged to resort to artificial respiration, and once had to continue it for ten minutes, as during that time there was but one or two feeble attempts at inspiration. The evening before I had placed the child on the $\frac{1}{600}$ of a grain of sulphate of atropine every three hours.

Dr. William Pepper then saw the case with me in consultation, and suggested combining a small amount of nitrite of amyl with the ether to prevent if possible the stage of exhaustion. This combination seemed to have a good effect; but, as the amount of ether required seemed to render the child drowsy and disinclined to nurse, I gradually diminished the proportion until the mixture contained one-fourth part of nitrite of amyl. This mixture was kept in a small vial, and with each cough the end of the finger was wetted with the mixture and held close to the child's nose and mouth, so as to catch the first inspiratory effort.

Thus administered, the child practically got nothing but nitrite of amyl. After the commencement of this treatment the child never had another attack of exhaustion, and the severity of the paroxysms seemed to be lessened, although the child coughed just as frequently, the number averaging 50 in the 24 hours, the amyl being given each time.

No untoward effects were at any time noticed, even when once I held the bottle, containing at least 10 drops of amyl, to the child's nose.

It was difficult to judge of the amount of flushing produced by the drug on account of the flushing caused by the cough.

I am confident of the beneficial effect of the nitrite of amyl in this one case, and although one swallow does not make a summer I think the drug will be found of use in analogous cases.

Dr. John M. Taylor, who assisted me in watching the case, is also positive of the good effect produced.

In the short time that I have had to look up the literature of the subject, I cannot find that nitrite of amyl has been used in whooping-cough, nor has anybody that I have spoken to on the subject known of its use.

By diluting the nitrite with ether or alcohol, it can be administered in any dose required, and could more easily be put in pearls than the pure nitrite.

By placing it in a bottle with a small top, that can be covered easily by the finger, it can be almost immediately administered by simply wetting the tip of the finger by inverting the bottle.

The child is now doing well, and has had no complication other than a slight umbilical hernia.

Hot Baths in Uræmia.—The form of blood poisoning known as uræmia or toxæmia is so formidable an affection, and withal so frequent, and one that its consideration is justly regarded as of great importance. It is notorious that the use of diuretics in such cases is generally futile, and therefore the chief reliance must rest on the action of the skin and bowels. As a means of greatly augmenting the action of the skin, no other measure has given such satisfactory results as the warm bath. A recent case in which I employed them, to my mind, will illustrate their good effects.

One evening, a short time ago, I was sent for in great haste to see a patient about twelve miles from my office, who was said to have convulsions. I immediately obeyed the summons, and, on my way to the patient's residence, I ascertained something of his history, from the messenger. The patient was a stout, healthy lad, about 18 years of age. He had been attacked with a mild form of scarlet fever about three weeks previously, from which he had apparently made a rapid recovery, and seemed to be doing very well, until about the 21st or 22d day, when some puffiness of the face, and especially of the eyelids, became apparent, and he complained of headache, and passed very little urine—and that of a thick, turbid appearance. On the morning of the 25th day from the attack of scarlet fever, he was seized with convulsions. A medical man in the immediate vicinity was called in. He administered chloroform, applied mustard to the spine, draughts to the feet, etc. He remained with the patient most of the day, and left in the evening, saying that he would not live through the night. This alarmed the friends, and they had, therefore, sent for further counsel. I arrived about twelve o'clock at night; on entering the room, I found the patient in a comatose state, with a recurrence of the convulsions every ten or fifteen minutes—having increased very much in force and frequency during the past twelve hours. The pulse was about 130 per minute; inspiration

about 30; pupils dilated; skin harsh and dry. He had passed very little urine during the last 24 hours, and it was high colored and loaded with albumen. I diagnosed the case as one of uræmic intoxication, arising from desquamative nephritis, and treated accordingly. I ordered a warm bath, a large wash-tub being extemporized for that purpose. I had him seated in the tub, and wrapped hot blankets around his legs and shoulders. He was kept in this position for ten or fifteen minutes, and then put to bed, and friction applied to the surface of the body. Ice was applied to the head; and as deglutition was impracticable, I ordered three drops of croton oil to be placed on the tongue. This produced a free evacuation of the bowels in a short time; the skin became moist, the convulsions gradually diminished, and ceased entirely in about three hours. I remained with the patient until five o'clock in the morning. He had no return of the convulsions during this time, but he was still unconscious. I could hold out no hopes to the friends of his ultimate recovery, although I had been able, by means of the bath, to break up the convulsions in the meantime. I now left the patient, but fearing a return of the convulsions, I directed the repetition of the bath, about six o'clock in the morning. This was done; and about three or four hours after wards consciousness returned; and, upon my second visit, I found him in a much better condition, with a fair prospect of recovery. The patient continued to improve under ordinary treatment, and in a short time was able to attend to his usual duties.

I have adopted this plan of treatment in several instances, and it has invariably been attended with marked success. The safety of the patient in such cases depends upon a free action of integument, without which no other treatment is of any avail. FRERICHS strongly recommends benzoic acid in such cases; but I cannot say that I have ever seen any benefit from its use Chloroform is highly spoken of in the treatment of this affection. There is no doubt that in some forms of convulsion—such as those arising from some form of eccentric irritation—chloroform is exceedingly serviceable, and has proved so in my hands on more than one occasion; yet, I cannot help thinking that in cases due to a blood poison, it is worse than useless—nay, positively injurious.—S. G. GOWE, M. D., in *Mass. Med. Jour.*

CHLORIDE OF SODIUM IN BRIGHT'S DISEASE.—This is certainly a very simple remedy, yet DR. ALLARD MEMMINGER, of Charleston, S. C., highly lauds it in the New York Medical Journal, July 31. He has only tried it, so far, in four cases, but his observations are of value, because it alone was used, to the exclusion of all other drugs. At first he orders ten-grain doses of the chloride, contained in gelatin capsules, three times a day, and, if the state of the case allows, by preference one hour after or before meals. He generally reversed each day the order of giving; thus, if one day the capsules are given before meals, the next day they are prescribed after. If the patient complains of no nausea, he allows him to keep up; but at the slightest intimation of a sick stomach, he orders him immediately to resume the recumbent posture, and there remain for an hour or so, after which this temporary ill-feeling always subsides. The second day of treatment he increases the dose to two capsules three times a day, and every other day he increases by one capsule until the patient is taking five capsules three times a day. About this time the good effects of the treatment will be apparent, not only from the improved subjective and objective symptoms of the patient, but from the improved condition of his urine. Albumin will, of course, at this period be found still in abundance, that is, if the case is at all a grave one; even here, however, if you institute a gravimetric examination, you will find a decided improvement, not so much in the absolute as in the relative decrease in albumin.

At this juncture he orders the chloride to be diminished in quantity, and he has so far found that, after the system has thus been brought fully under its influence, it requires but two capsules, three times a day, to keep up the desired effect. If at this stage of the case there is any decided nausea or disinclination to take the medicine, he stops the same, and during the interval gives one or two alterative pills, after which he proceeds again to a resumption of the chloride. Should albumin again increase in the urine, urea and chlorides diminishing, he immediately resorts to large doses, thus bringing the patient once more under the influence of the chloride, after which he again reduces.

The effects of this treatment are most marked. Headache, œdema, low spirits, general weakness, and anæmia, give way to just a reverse order of things, and the patient, who a few days before was gloomy and desponding, it now full of life and hope.

Thus has it appeared to him in each of his four cases, and, if he has been led to express views that to many appear extreme, it is because his convictions are based upon clinical observations which, up to this time, he has never had the pleasure of recording with any other form of treatment. He would, therefore, urge a thorough trial of this therapeutical agent by the profession, on the following grounds:

1. It is harmless if properly administered.
2. Its effects are comparatively uniform, provided it is given for a sufficient time. That he has so far used it only in chronic cases of no long standing does not, in his opinion, militate against its beneficial effects; for, even should it not be found a cure for Bright's disease, may it not become an important article in our medical armamentarium—indeed, if only an ameliorator of man's sufferings and a prolonger of his life?
3. It may be employed as an adjunct to all recognized methods of treatment without detriment to the patient.

Thus, then, he asks the practitioner, teacher, and scholar, does not an array of such facts, coupled with the well-known physiological action of chloride of sodium, demand from each and every one of them a fair and honest trial in this most formidable of diseases?—*Medical and Surgical Reporter.*

THE TREATMENT OF LUPUS BY LOCAL APPLICATIONS.—DR. P. G. UNNA, of Hamburg, writes as follows in the Lancet of September 25, 1886:

Mr. Beiersdorf (40, Wohlers Allée, Altona) has, upon my suggestion, composed the following five plastermulls for the cure of lupus. Each roll (length one metre, breadth twenty centimetres, equal to one-fifth square metre) contains:

Salicylic Acid.	Creasote.
10.0 grm.	20.0 grm.
20.0 "	40.0 "
30.0 "	50.0 "
40.0 "	40.0 "
50.0 "	50.0 "

Any one wishing to avoid, from the first change of the plastermull, the painful first period after its application, and in this way to institute a completely painless treatment for lupus, may paint the raw surface with a four-per-cent. aqueous solution of cocaine ten minutes before applying the second plaster. For this short anæsthesia cocaine is as efficient as it was found useless in attempting to produce a lasting diminution of the pain, in addition to the salicylic acid. But creasote is, to my mind, not only the morphine of the skin; it has another especial value in the treatment of lupus—its antiseptic pawer. It is not only a correctant of the salicylic acid, but also the best adjuvant we can find. At least, excepting cod-liver oil, I know of no antitubercular remedy in which I have so much confidence as in good beech tar creasote. In any case of this phthisis of the skin, with which we are now concerned, it is a remedy which, applied in the concentration and in the manner indicated, deserves every consideration. This supposition has, moreover, been proved in practice to be correct. The salicylic creasote plastermull is a remedy which brings about a cure of lupus without any extraneous aid. The strongest plaster necessary for the case should always be employed at the commencement, since at first a relatively normal skin-surface has to be attacked; under these the lupus tubercles can be seen to soften and break down. The action can be accelerated, as is the case with all plastermulls, by covering them with hot poultices. The dressing should be changed once, or, at the most, twice, daily, with or without the application of cocaine, and the parts cleaned, according as the susceptibility of the patient will allow it, with linimentum calcis, oil, lard, or even with soft soap and hot water. As soon as it is found that with this simple treatment the excavations are getting shallower, and that no new ones are appearing, we may assume that the lupus nodules have fallen out. It is then advisable to have recourse to weaker salicylic-creasote plastermulls, and finally, when the lupus seems to be totally destroyed, but the process of skinning over is sluggish and a quicker completion is wished for, to still weaker means, such as mercurial-carbolic or zinc-salicylic plastermulls, or to a simple healing remedy like iodoform, ichthyol, etc. Smaller and more isolated nodules are generally completely cured under the salicylic-creasote plastermulls, even those which are richest in salicylic acid. In general, I consider it better to let the strong plastermull lie somewhat longer than is apparently necessary, so as to give a chance to even the deepest-lying nodules to shell out.—*Medical News*, October, 1886.

A Study of Some New Purgatives.—Dr. Desnos (Bull. gén. de thér., Jan. 30, 1886) has been making a study of the physiological effects of the following four new purgatives: baptisine, sanguinarine, juglandine, and phytolaccine. He has given these purgatives to 48 different individuals in the following proportions: Baptisine to 14, sanguinarine to 4, juglandine to 13, and phytolaccine to 17. They were given in pill form in doses of 10, 20, and 30 centigr. (1½, 3, and 4½ grs.). The first dose was administered at 10:00 a. m., and the second dose at 10:00 p. m. The four drugs had the common property of causing no disturbance whatever of the stomach. In some of the cases purgation occurred after the first dose, in the majority of cases not until some hours after the second dose, and in a few cases of obstinate constipation no effect followed until an enema had been given. Baptisine proved to be an efficient cholagogue, and, excepting a few failures in patients who were in bed, in showed itself a faithful purgative. The dose employed ranged from 10 to 30 centigr. (gr. 1½–4½). Sanguinarine did not fulfill the expectations derived from experiment with the drug. The author has given it in as large a dose as 60 centigr. (gr. 9) with negative results only. Juglandine exhibited marked cholagogic properties in doses of 10 to 20 centigr. (gr. 2½–3). Phytolaccin e is also an efficient cholagogue in the same doses as the preceding. The author prefers it to all others. It produced easy and copious stools containing considerable bile In large doses it provoked vomiting, followed by depression, and in a few cases even by convulsions. In conclusion the author states that baptisine and juglandine are destined to render incontestable service as laxatives in spite of some inconveniences, and that phytolaccin, being most certain and attended with fewer inconveniences, will form a valuable acquisition to the therapeutics of constipation. Sanguinarine, on the other hand, does not deserve to come into favor.—*N. Y. Med. Jour.*, Sept. 11, 1886.

Gelosine a Valuable New Excipient.—In the Bulletins et Mémoires de la Société de Thérapeutique (Paris, July 15th), M. Guérin published a communication on gelosine, a mucilagious principle which he has extracted from the *gélose* of Gelidium corneum, an alga of Japan. It is an amorphous, uncrystallizable, colorless, non-azotised substance, closely resembling lichenine of the lichens and fucine of the algæ. It is also similar to the pectose of ripe fruits which determines alimentary vegetable jellies. Gelosine is dissolved in boiling water, of which it solidifies about 350 times its volume. To give an idea of this very great suspensive power, 250 grammes of gelosine immobilize 250 litres of water. On cooling, this solution is transformed into a fine transparent jelly, capable of assuming any shape and varying consistence. Therapeutically this jelly constitutes a valuable new excipient; salts, acids, powders, and extracts may be dissolved in it and dispensed in any desired form. The price of gelosine is so moderate that it may be used in hospital practice, and, when properly sterilized, it promises to be of use in the researches of micro biologists. As the substance is inalterable, it may be melted indefinitely with very little loss.

ALIMENTATION BY THE VAGINA.—DR. J. N. LOVE (Weekly Medical Review) concludes an interesting paper upon the alimentation by the following remarks on the vagina as a channel through which, in certain cases, an individual may be fed:

1. In cases which demand artificial alimentation where the conditions will permit, the vagina may be utilized to supplement feeding by the rectum.

2. In some instances, disease of the alimentary canal in its entirety precludes feeding by either the stomach or the rectum; in such cases the vagina may be utilized to practical advantage.

3. That whether the vagina or rectum be used for purposes of feeding, the materials should be as thoroughly digested, previous to using, as possible; the milk albumen or beef fibre completely peptonized, and all the starchy matters changed into dextrose or glucose.

4. In many instances the vagina may be utilized for purposes of general medication and stimulation, and the stomach saved for the important one of feeding.

5. In many cases vaginal feeding, stimulation, and medication is beneficial; in many others it is a potent means for saving and prolonging life.

6. In both rectal and vaginal feeding the same gentle care is necessary, and one advantage possessed by the latter over the former, is that the vagina is much the more tolerant of intrusion, and can be utilized for an almost unlimited time without revolting.

FORTY CASES OF HABITUAL CONSTIPATION OF HEPATIC ORIGIN TREATED BY CASCARA SAGRADA.—A correspondent of the British Medical Journal, September 25, 1886, reports that DR. PARIS, of Peseux, has treated 40 cases of habitual constipation (of hepatic origin, in chlorotic girls, etc.) by cascara sagrada, given after the formula of DR. BUNDY, which is as follows: ℞ Fluid extract of cascara sagrada, 1 scruple; syrup, Tater, of each 30 grammes. Three or four teaspoonfuls a day. The results were most satisfactory in all cases but one, a case of hepatic cirrhosis, where the administration was discontinued on account of violent colic.

ANTISEPTIC VASELINE.—DR. P. MENIERE advises when uterine dilators, of either metal or vegetable material, are to be introduced that they be previously lubricated with the following mixture, which is not only antiseptic but favors dilatation:

Vaseline, ℥ ij.
Extract of belladonna, ʒ j.
Bichloride of mercury, gr. ¾.

This pomade is best kept in long, narrow bottles, into which the instrument may be plunged before it is used.—*Gazette de Gynæcologie*, September 1, 1886.

ULEXINE.—It is curious that the common furze, or Ulex Europæus, should have been found to yield an alkaloidal substance; for it has been so frequently examined chemically in order to ascertain its nutritive qualities that one would have thought an active alkaloid could not have escaped detection. However, M. GERRARD has extracted an alkaloid that is very soluble in dilute hydrochloric acid, forms long oblique prismatic crystals, readily soluble in chloroform, and giving with ferric chloride a deep-red color. The physiological action has not yet been worked out, but it has been found that the alkaloid has a paralytic action on frogs.—*London Lancet.*

LINSEED OIL IN PRURITUS ANI.—A correspondent writes us that he has lately witnessed the triumph of linseed oil in the treatment of pruritus ani where all the classical remedies had failed. In the case of two patients who had been for several years sufferers from pruritus ani with a trifling erythematous eruption and no rectal complications that could be discovered, the free external use of linseed oil at bed time about the parts gave immediate relief, and thus far free inunction with this simple remedy has given complete exemption from the nocturnal annoyance.—*Boston Med. and Surg. Journal.*

COCAINE IN ANGINA PECTORIS.—We referred some time ago to the very favorable reports by HUCHARD on the prolonged use of iodide of sodium in angina pectoris. In the Revue de Médecine, August 10, 1886, LASCHKEVITCH records four cases in which excellent results followed the administration of cocaine in doses of one-half to one-third of a grain, three times a day. The attacks appear to have been relieved very quickly, though scarcely with the rapidity which characterizes the action of amyl nitrite. A combination of these remedies might prove more serviceable than either of them alone.—*Phil. Med. News.*

COCAINE IN VOMITING OF PREGNANCY.—Still another remedy for this much medicated condition has been found in the hydrate of cocaine. When everything else had failed, when hope had fled and abortion seemed the only alternative, DR. HOLTZ gave his patient a hypodermic injection of cocaine, and the vomiting ceased. The writer is happy to record the instance as one of the few in which cocaine has appeared to be good for anything, except for local anæsthesia.—*Canada Medical Record.*

A NEW SOURCE OF QUININE.—The Indian Medical Gazette says that caprea bark has been found containing quinine; and has this advantage, viz, that the plants grow near the coast and consequently the bark can be exported at much less cost than the cinchona bark, which is brought long distances from the hills and at a heavy expense.—*Am. Pract. and News.*

HYPODERMIC INJECTIONS OF SOLUTIONS OF IRON.—HIRSCHFELD (Bull. gén. de thérap.; Lyon méd.) asserts, as the result of his experience, that such injections are not only painful, but useless. There is no preparation of iron, he thinks, that fulfills all the requirements of a hypodermic solution.

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Original Articles.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, Oct. 18, 1886.

E. J. DOERING, M. D., President, in the chair.

OFFICIAL REPORT.

DR. R. W. BISHOP read a paper entitled:

IS ALOPECIA PREMATURA CONTAGIOUS?

DR. BISHOP thought this disease due to micro-organisms upon the shafts of the hair, and that it is contagious. He has made a series of experiments, assisted by DR. OSCAR LASSAR. A typical case was that of a perfectly healthy young man whose head was nearly bald on top. The hair from the diseased surface was brittle and came out easily when pulled. Microscopic examination revealed a large number of fungi on the scalp and the shafts of the hair, the root being free from the parasite. The diseased hairs were cut and mixed with vaseline, which was rubbed on the skin of healthy rabbits, and in two weeks the hair entirely disappeared from the parts which had been rubbed. Experiments were continued, and it was found that the hairs from the inoculated animals possessed increased virulence.

The patient was treated as follows: The head was thoroughly washed for fifteen minutes with tar soap, which was removed with warm water. The head was then exposed to a warm water douche, which was gradually cooled until the water was quite cold; it was then rubbed with a rough towel until dry, and afterwards washed with a solution of corrosive sublimate 1:500. This was removed and a one-half per cent. of lithol applied, and, after this, one and one-half per cent. carbolic oil was applied very slowly. The treatment was continued daily for eight weeks, and the result was a fine growth of hair with beginning pigmentation at the end of three months.

DR. JOSEPH ZEISLER thought this was a disease which possibly might be produced by vegetable organisms. He knew of DR. BISHOP'S experiments, but still there were strong objections to the value of these experiments. MICHELSON made some experiments by using a mixture of vaseline and rancid oil and rubbing it on the skin of guinea-pigs, and after these inunctions the animals got bald on the places anointed, although neither sick hairs nor scales were used. There are older experiments which show that animals fed on old cheese or hard boiled eggs get bald. Another point was, that the disease is so frequently met with in men and so rarely in women, between whom there are plenty of chances for contagion. It is an ascertained fact that the disease most frequently occurs in men who in their earlier years (17 to 25) suffer from pityriasis of the scalp, so that there certainly is a causal relation between this affection and alopecia. After all, he thinks that the contagiousness of this disease is still an open question.

DR. FRANK BILLINGS spoke on

HOSPITAL PRACTICE IN VIENNA, WITH EXHIBITION OF NEW URINE TESTS, NEW INSTRUMENTS, ETC.

The hospital at Vienna contains about 2,500 beds. The number of deaths per year is about 3,000. PROF. NOTHNAGEL, who presides over the first medical clinic, has from 80 to 100 patients in his ward continuously. Histories of the patients are written by assistants and left in charge of the nurses. Temperature charts are kept of important cases, the temperature being taken every two hours. Daily clinical and microscopical examinations are made of the urine in all important and grave cases. DR. BILLINGS gave an illustrated description of the tests employed. He said that in the Vienna hospitals some form of tuberculosis is found in nearly 70 per cent. of the deaths. The treatment of acute diseases is generally expectant, and in typhoid fever, milk and other liquid is used. Previous to 1879, when the city obtained its water from the Danube River, typhoid fever was almost epidemic in Vienna. In that year they put up new water works, and since that time not one case has developed in that city. The obstetrical department is divided into three clinics, with 3,000 confinements in each clinic yearly. Four cases of sublimate poisoning occurred last winter. The autopsies showed ulceration throughout the alimentary tract with charred, black appearance of the mucous membrane throughout the colon and rectum. The solution used in these cases was 1 to 4,000, bichloride of mercury. Abortion is treated by rest in bed with non-interference, unless too severe hæmorrhage occurs, when tampons are used. In the gynæcological department PROF. BRAUN performs laparotomy

every Wednesday. Where a part of tumor is left in the stump, the prognosis is bad even when treated externally, because of the low vitality of the tumor tissue, which becomes necrotic. In operations about the anterior vaginal wall no anæsthetic is used. In the surgical wards of PROFS. BILLROTH and ALBERT, closest attention is paid to cleanliness. The operating rooms are constructed with floors inclined to the centre, where a grating allows all blood, water, etc., to flow away. The floor is thoroughly douched every day. Sponges, silk sutures and towels used in operations are boiled in a five-per-cent. solution of carbolic acid for one hour, then placed in a five-per-cent. solution for fourteen days. Cutting instruments are polished and placed in a two and one-half per cent. solution of carbolic acid during the operation. Instruments used in operations for abscesses, etc., are heated in flame and sent to the instrument maker to be repolished. A ten-per-cent. solution of carbolic acid is used for irrigating wounds during operation. For partial amputation of the tongue a bloodless method is used as follows: First, a double stout suture thread is passed through the centre of the tongue from below upward and backward, beginning at the frænum; the two threads are twisted and tied upon the side firmly enough to control the vessels. The part is then amputated smoothly by taking out a triangular section. Two deep, and a sufficient number of superficial sutures close the wound after the vessels are secured. A bacteriological laboratory is connected with the pathological department, and cultivations of bacteria are made from typhoid fever, pneumonia, erysipelas, glanders, septicæmia, and other diseases. Experiments with bacterial cultures are made upon lower animals. Nearly every department of the hospital now has a bacterial laboratory, and the search for new forms and confirmation of already discovered bacteria, goes on with enthusiasm.

DR. C. W. PURDY said that in testing the urine for evidence of kidney diseases, the only proteids of any significance were serum albumin and globulin. The presence in the urine of peptone, hemialbumose, etc , points to morbid conditions outside of the kidneys, and whatever light they may shed upon general conditions, they afford us no information whatever as to the state of the kidneys. He mentioned this because so much had been written of late on peptonuria, and the various transition proteids, that an impression seemed to have arisen that the presence of these in the urine was of scarcely less importance than that of serum albumin. The only bearing these non-homogeneous proteids have upon the subject is the fact that their occasional presence in the urine may, with certain tests, be mistaken for serum albumin, unless great care be exercised.

He believed the most delicate of all tests for albumin in the urine to be the potassio-mercuric iodide, with citric acid; but that it had not met with general favor thus far on account of the errors liable to arise through its use. It is necessary to discriminate between the precipitates formed by this test with peptone, alkaloids, above all with mucin, and that formed by serum albumin. It is true that heat clears up the precipitates due to peptones and vegetable alkaloids, but not so with mucin, the latter being practically indistinguishable from albumin. He has lately, however, come upon a method which he believes will correct not only the errors due to the presence of mucin, but also those likely to arise from the presence of alkaloids and peptone when precipitated by this test. The method is very simple, viz: after having applied the reagent to the suspected urine, if a precipitate be formed, add hydrochloric acid in volume equal to the quantity of urine tested; if mucin, peptone, or vegetable alkaloids be the cause of the turbidity, it promptly clears up; while if due to albumin the precipitate becoms flocculent and settles, but does not dissolve. A considerable number of experiments have shown him that hydrochloric acid in volume equal to one-half the quantity of urine tested quickly clears up the peptone, alkaloid and mucin precipitate, while it requires at least two volumes of hydrochloric acid to dissolve the slighter traces of albumin in urine when precipitated by the mercuric test.

With regard to sugar testing: In addition to the test brought forward by DR. BILLINGS, two new ones have recently been introduced, both of which are of such exceeding keenness that they are claimed to be able to detect 0.00001 per cent of sugar. These tests are, alcoholic solutions 15 to 20 per cent. of alpha-naphthol, and thymol. Two drops of either of these solutions are added to two cubic centimetres of urine, and the mixture briskly shaken; sulphuric acid is next added in quantity equal to the volume of urine, and again briskly shaken. In the case of alpha-naphthol a deep violet color is developed in the presence of sugar, and dilution with water throws down a violet blue precipitate, soluble in alcohol with a yellow color, or in caustic potash with a deep yellow. In the case of thymol a dark red color is produced, and, on adding water, a precipitate settles, which dissolves with alcohol, forming a yellow color, more decided if ammonia be added.

DR. PURDY often had samples of urine sent him, which though loaded with albumin, no casts could be found therein. These are samples of urine which had been long passed—perhaps several days before, alkaline fermentation having occurred, and the urine rendered alkaline quickly dissolves the casts. In searching for renal casts it is of the greatest importance

to have the urine as freshly passed as possible. His method of examining urine for casts is as follows: First, he prefers to have the urine passed at his office. If the urine be neutral or alkaline in reaction, he renders it frankly acid by the addition of dilute acetic acid. In all cases he adds a solution of resorcin to the urine which prevents change for weeks. The urine thus treated is set aside in a conical glass, carefully covered and allowed to stand for from twenty-four to forty-eight hours; at the end of this time a few drops—not more than ten—are taken up by a glass tube from the bottom of the glass, and one or two drops placed upon a glass slide and examined under the microscope. He had had no difficulty in finding casts by this method if they were present in the urine even in sparse numbers.

Dr. Frank S. Johnson described a new form of *Hæmoglobinometer*, viz.:

THE HÆMOTER OF VON FLEISCHL.

It consists of a stand with a horse-shoe base, an upright, a stage, and a well divided perpendicularly in two equal compartments and closed below by thin glass. One-half of the well is to hold blood of known dilution, the other half is for clear water. This well fits an opening in the stage. Beneath the stage is a plain white reflector. On the under side of the stage is a frame that can be rocked back and forth. Set in it is a narrow wedge-shaped piece of ruby glass, whose width is one-half that of the opening in the stage. The thicker end of the wedge gives by transmitted light the color of a dilution of blood containing the maximum amount of hæmoglobin. The thinner portions correspond with the color of a dilution of blood poorer in hæmoglobin. The percentage of variation from the normal amount of hæmoglobin is estimated by comparing the color of the blood solution with some part of the ruby wedge. Only artificial light can be successfully used for the examination.

With the instrument are several capillary tubes for measuring the amount of blood to be used for comparison with the colored glass standard. The necessary amount of water for making the dilution is measured in one of the chambers of the well.

The blood for examination is best obtained by pricking the ball of an uncompressed finger and forcing out a drop by gentle pressure. The amount needed is taken in the capillary tube. One of the halves of the well having been previously half or two-thirds filled with water, the blood can be easily washed from the measuring tube into it. Then both halves are accurately filled with water so that the upper surfaces are plane. A small pipette is furnished for this purpose. This well is then so adjusted that the half holding water is above the colored glass, and that holding the blood solution receives its light directly from the white reflector. The next step is to so adjust the ruby wedge that the light it transmits corresponds in color with that passing through the blood solution. The observer then reads off the percentage of the normal amount of hæmoglobin as indicated by a scale graven upon the metal frame carrying the glass wedge. The average percentage of hæmaglobin in the blood of healthy individuals varies greatly with age and sex. The average is from 12 to 13 per cent. The percentage of this amount is ascertained by comparison with the color scale. This result should be corrected as far as possible for the known variation of hæmoglobin in healthy blood. Taking as the normal percentage that found in the blood of healthy individuals between 25 and 30 years of age, it is found that in the first few weeks of life the percentage is greatly in excess; but after six months or a year, it is below the adopted standard, reaching it again at about 25 or 26 years of age, and that after the thirtieth year, the amount is below the normal but is variable.

The instrument recommends itself to the ordinary practitioner. It does not entirely replace the hæmocytometer, but in all cases where it is only necessary to watch from time to time the rise and fall of the hæmoglobin in the blood, it can be done much quicker and more accurately than by the hasty counting of the corpuscles by the microscope.

Dr. J. J. M. Angear thought that it is necessary to count the globules, because we have conditions where the red corpuscles are normal in number but deficient in hæmoglobin, hence the necessity of both instruments.

Dr. C. E. Webster, chairman of the Pathological Committee, exhibited a spinal column and said that it showed caries resulting in the entire destruction of the bodies of one of the vertebræ, without the protection of the characteristic deformity before the removal of the ligaments, no curvature being noticeable.

[OFFICIAL REPORT.]

Stated Meeting, Oct. 20, 1886.

E. J. Doering, M. D., President in the chair.

Dr. Charles Warrington Earle entertained the Society with a very interesting account of his recent trip abroad, referring more particularly to observations made in the

HOSPITALS OF PARIS AND THE LABORATORY OF M. PASTEUR.

He first visited the Hospital Lariboisare, which has an outside and inside obstetrical department in which 3,500 women were confined last year. This hospital has 875 beds, and the several pavilions are disinfected by carbolic

acid, and thoroughly washing everything in them with solution of bichloride of mercury. But the favorate antiseptic is the biniodide of mercury. An interesting feature in this hospital is the contrivance for keeping up the body heat of prematurely born infants. It is a square box so constructed as to prevent the loss of heat, the top of which is covered with glass. In the upper part is placed a thermometer and a little basket with soft clothes, in which lies the baby. In the lower part of the box is an arrangement for the introduction of hot air, either from the heating apparatus of the building, or by heating air by gas or hot water bottles. For infants younger than seven months the temperature is maintained at 100° to 105° F. Between seven and eight months the temperature ranges from 85° to 100° F. The children are fed with breast milk when possible, and are not handled or exposed except when absolutely necessary. By using this incubator they save a large number of the lives of the prematurely born infants. The Maison des Accouchements is TARNIER'S private hospital. Although not a modern hospital, asepsis is aimed at, each patient being isolated and having her own irrigator, the permanganate of potash being the favorate antiseptic. Carbolic acid is sprayed in the wards continually. In turn he visited the Hospitals Bichat, Tenon, and Hôtel Dieu, in all of which the rule is cleanliness and disinfection. DR. EARLE said his most interesting visit was to the dispensary and laboratory of M. PASTEUR. The dispensary was smaller than the number of patients demands, and here PASTEUR spends his forenoons exercising a supervision over the treatment of the scores of unfortunates who go daily to be inoculated for hydrophobia. Nearly every country on the globe has sent patients here. DR. EARLE then explained the mode of preparing the virus. He said, also, that the majority of scientists on the continent are satisfied that M. PASTEUR is honest in his endeavors to prove that he has discovered a cure for hydrophobia, and that they are simply waiting for time to prove if such be the case. They have great confidence in PASTEUR, and believe that at the proper time he will announce the truth.

DR. CHARLES F. SINCLAIR read a paper on

THE RELATION OF CERTAIN FORMS OF DEFECTIVE VISION TO HEADACHE IN YOUTH.

He said that the headaches arising from defective vision are very numerous. They possess certain definite characteristics according to the degree and character of the ametropia. Thus, instead of the usual classification, the ophthalmologist might furnish a terminology of his own based upon the condition of the eye. The pain in these cases increases as the errors of refraction become more complicated. A woman had suffered with intensely painful headaches for fifteen years who was found to have mixed astigmatism, and here properly adjusted lenses effected a cure.

It is in childhood and youth especially that these different forms of ametropia manifest themselves in headache. DR. W. H. DAY, of London, however, in his work on the "Nature and Causes of Headache," in which he devotes a lengthy chapter to the headache of childhood and youth, does not mention ametropia as a possible cause.

Nevertheless the eye, among school children, is frequently the cause of all the head trouble. Among American children one form of ametropia is exceedingly common and very disastrous in its effects. It is difficult to detect. It may in certain cases simulate different forms of ametropia, and even normal vision. He referred to a case in which occurs a slight degree of astigmatism under one dioptric.

Maud W., a school girl 14 years old, had suffered with severe headaches. On examination excellent vision was found, but minus lenses improved it and made it normal. After the use of homatropine, however, half a dioptric of hyperopic astigmatism was found, which was corrected and the headache cured.

Emily R., 15 years old, had suffered with constant headache for a year. On examination, .50 D manifest hypermetropia was found, and only this corrected, as the patient would not submit to the use of atropine. This patient returned in a few days saying that her headaches were as bad as ever, when homatropine was used and a small degree of hypermetropic astigmatism was found. This being corrected, a cure of the headache was effected.

In another case there were constantly recurring attacks of vertigo and dizziness, together with severe unilateral headache caused by astigmatism, and which properly adjusted cylindrical lenses cured.

These are types of an exceedingly large number of cases where headache can be cured by a weak cylindrical lens. These cases are interesting not only because of their marked consequences, but because of their tendency, in certain cases, to exactly simulate other conditions, and they certainly suggest the advisability, in every case of severe headache, to examine the eye only when under the influence of atropine.

DR. W. FRANKLIN COLEMAN said that in an examination of the eyes of pupils of Boston, in eighty-nine cases of defective vision fifty-nine were traceable to over-study. Out of this number twenty-five to fifty per cent. of the cases of headache which occurred were relieved by supplying suitable glasses. Another class of cases in which headache occurs is when there is weakness of the recti muscles. By supplying proper prismatic glasses this weakness may be overcome, and the headache disappears. Other

factors in producing headache are improper light and too low desks, thus causing the pupil to strain the eyes. So far as artificial light to read by is concerned, the incandescent electric light is probably the best, as it most nearly resembles sunlight, and is free from heat, dust and flickering.

DR. F. C. HOTZ said he believed the authors of such papers as this often exaggerate the importance of their observations. The result is patients are often instructed to go to oculists, but do not do so on account of the expense, or for some other reason, and the patient therefore receives no treatment. But he has been surprised to see how few cases of defective vision come to him complaining of headache. He has not found it a prominent symptom. In looking over his record of cases he finds a great many cases of astigmatism, hypermetropia, and metropia, in which the symptoms complained of are difficulty of vision, but not headache. Children often complain of not being able to see the figures on the black-board, and consult the oculist for that trouble directly. But if a large number of cases of the eyes of children are examined, it will be found that in youth a normal eye is often far sighted, and yet such persons are able to do the work required. However, in cases of defective vision, accompanied by headache, the defect of vision should be corrected.

DR. J. E. COLBURN related his personal experience with astigmatism, stating that not only had he headaches, but he could not study well, and these difficulties disappeared with the using of proper glasses.

MANGANESE IN THE TREATMENT OF AMENORRHŒA.

BY J. A. WESSINGER, M. D., HOWELL, MICH.

"We are desirous of calling attention to the value of a very simple remedy in a very common complaint," were the words first uttered by DRS. RINGER and MURRELL, in the March number of the London Lancet for 1883. Since that time medical literature in both Europe and America has been prolific on this topic, and many glowing accounts have been given of the value of this "very simple remedy," in the treatment of amenorrhœa.

For many years the medical profession wandered about, many times in the by-and-forbidden paths, in eager search for an agent that would take a permanent place in the therapeutics of the condition in question. Iron, aloes, nux vomica, strychnine, ergot, pulsatilla, and even nitro-glycerin had been vaunted, and in turn abandoned, in the treatment of amenorrhœa, and it was not until England's two great therapeutists had given to the profession their most valuable discovery, that physicians could look for even a moderate measure of success in the treatment of "a very common complaint."

It might, at first thought, seem superfluous that more space in medical journals should be taken up with a subject so well known to the general profession. Yet, a valuable remedy cannot too often be brought before the mind of the practitioner; neither should we disregard the value of accumulative evidence in medicine.

Soon after reading DRS. RINGER and MURRELL'S article in the Lancet, I began the use of manganese in the treatment of the complaint under consideration. From April, 1883, to January, 1886, nine cases of amenorrhœa came to me for treatment. In treating these cases, permanganate potassium was used. Seven of these were unmarried ladies between the ages of fifteen and thirty years. Two were married women, one twenty-two and the other thirty years old. Of these nine cases six recovered. Five were from among the unmarried ladies treated, and one from the married ladies. In the six who recovered I prescribed the remedy continuously, until menstruation became established. In the three who did not recover, the remedy was given only three or four days previous to the regular menstrual period, and then interrupted until the next regular period. This method, together with an intolerance for the remedy, is probably the reason why the treatment was not successful in these three patients. The largest dose given was three grains four times a day in capsules, and the smallest dose, one grain three times a day in capsules. I have never given potassium permanganate in solution, owing to its taste.

Of the married women, the longest continued treatment was five months, and the shortest, one month. Five of the six cases had never menstruated, and one had menstruated twice. Of these patients, four were anæmic, and two were plethoric. In the two plethoric patients recovery was complete, showing that the remedy has a local action on the generative organs, rather than a general reconstructive effect on the constitution.

Since January, 1886, five cases of amenorrhœa have presented themselves for treatment. Four of these were married. The oldest of the four married ladies is thirty, and the youngest twenty one years. The unmarried lady is eighteen years old, and has never menstruated. Of the four cases one had never menstruated, two menstruate every two or three months, and one about every four months. These last five cases all made a good recovery. The longest treatment was six months, and the shortest six weeks.

In these last cases, at the suggestion of DR. DAVID INGLIS, of Detroit, I prescribed syrup iodide of iron and manganese, which prepara-

tion, I think, is more efficient and much more palatable than potassium permanganate.

It is unnecessary for me to say that in every case of amenorrhœa that presents itself for treatment, the pathology and causation must be thoroughly investigated before an intelligent line of treatment can be pursued. While it may be true that uterine therapeutics is still somewhat neglected, yet it will not do simply to prescribe manganese to each and every case in which there is a history of irregularity or absence of the catamenial flow, since we well know that some of these patients come in the domain of gynæcology, and that it is not internal medication, but the surgeon's knife that will set them right. To establish this premises, I need merely allude to amenorrhœa caused by extreme ante- and retro-flexion of the uterus, stenosis of the uterine neck, imperforate os, imperforate hymen, congenital absence of the uterus, and some other abnormal conditions that might be mentioned. The thing to do, therefore, is to make a careful examination of every case, and, if possible, get at the cause of the trouble and prescribe accordingly. In several of my cases I had an opportunity for repeated observations of the uterine neck, and always noticed that, just previous to the first menstrual flow, when the manganese began to have its desired effect, the uterine tissue changed from a pale pink color to a bright red hue, until finally, when the patient's recovery was complete, this red coloration of the uterine tissue became permanent. This condition indicates very plainly, to my mind, that manganese acts by producing a local constructive metamorphosis of the tissues of the female generative organs, and this establishes their normal function.

FLUID EXTRACT OF CORN SILK IN THE TREATMENT OF CYSTITIS.

BY RUSH. M. BROWN, M. D., MACON, GA.

Some months since, I had brought to my notice the use of the fluid extract of corn silk in inflammatory diseases of the bladder. The drug is usually given it doses of 10 and 20 drops, and given in this way it does give relief to some extent. But it occurred to me that as it had astringent properties, it would act more speedily if brought in direct contact with the mucous membrane of the organ.

After having tried many remedies usually prescribed in these cases, and after having administered the corn silk in the usual way, I determined to try a plan which I consider as original with myself. I procured Parke, Davis & Co.'s preparation and found it made a permanent cure in every case of pure and genuine cystitis.

My first case was that of a negro woman who came to me for treatment for a uterine trouble. She had been troubled with syphilitic ulceration of the vagina, but this I found on examination had been relieved by the treatment she had undergone in the hands of another physician. The uterus was normal, and her menstrual periods were regular. She complained of severe pains just above the symphysis pubis, and pain in micturition. She also had a slight mucous discharge after making water, which she thought was leucorrhœa, but I found that it came from the urethra.

I attached a small gum catheter to an ordinary Davidson syringe.

I first pumped as much hot water into the bladder as it would hold, that is, enough to thoroughly distend the organ. I then allowed her to get up and pass this off. I then put a teaspoonful of Parke, Davis & Co.'s corn silk to a half teacupful of tepid water, and injected the whole of this into the bladder, and ordered her to retain it as long as she could. At first it could not be retained more than 20 minutes or half an hour. The next day I called and she showed me a quantity of soapy looking mucus, and she expressed herself as feeling much better. I did not repeat the injection this day, but used the injection of hot water as before.

After the first injection I ordered her to take 10 drops of the extract in a wineglass of water by mouth, three times a day before eating. I then used the injection twice a week, preceded by the hot water; she continuing the 10 drops internally three times a day every day.

This treatment was continued for six weeks, at the expiration of which time she was dismissed cured.

My second case was that of a white woman, who was suffering from a uterine displacement; this I had to correct before treating her bladder. She was under treatment for the bladder nine weeks; she was discharged at the expiration of that time, and has continued well ever since, and has gained flesh.

My third case under consideration was a negro man, who had gonorrhœa. The bladder was very much inflamed, I suppose from his having used a syringe and forcing the injections along with the gonorrhœal discharge into the bladder. In two weeks he came to my office and said he was entirely well.

I will not say that the corn silk cured his gonorrhœa, for that was not the object in using it in this case.

Other cases I could report, which I have in my case book, but I deem it sufficient to say that they were all treated alike and with the same result, but the time varied as to recovery.

The medical profession will find this drug a valuable addition to our materia medica, and well worth a trial at their hands.

But the treatment must not be left to the patient; the physician must use this method him-

self or put it into the hands of an experienced nurse, who understands introducing a catheter. I can confidently endorse Messrs. P., D. & Co.'s preparation of this drug.

A CASE OF RETRO-UTERINE HÆMATOCELE.

BY J. A. WESSINGER, M. D., HOWELL, MICH.

The following case is related more particularly to call attention to a rare symptom in cases of pelvic hæmatocele:

Miss B., single, æt. 34, has always had usual health up to last March, when the patient was taken sick with pelvic peritonitis, while residing in Chicago. Soon after, she was transferred to the Women's Hospital, of the above-named city, and was there confined to the bed about five months, when she was brought to the home of a sister residing here, and thus came under my observation, for treatment. I first saw the patient September 17, 1886, when the following history was related by her. In March last, during her regular menstrual period, she "took a severe cold" while working as a seamstress in a damp and cold room. Menstruation became suppressed and a severe inflammatory process developed in the pelvic tissues. She saw nothing at the next menstrual period, but became regular afterwards while receiving treatment at the hospital above referred to. On making a digital examination I detected a resistant mass in the Douglas cul-de-sac, well marked ovarian tenderness, and a rather immovable and sensitive condition of uterus. The abdomen was somewhat tympanitic. Pulse and temperature normal, appetite fair, marked prostration, patient unable to walk. My diagnosis was retro-uterine hæmatocele, with an old-standing pelvic peritonitis. I put the patient upon potassium iodide grs. ii, et hydrarg. bichloride gr. $\frac{1}{16}$, night and morning, and also tinct. nux vomica gtt. iii. combined with vinum fraxini Americanæ ʒ j, three times a day. Also injection of one gallon hot water per vaginam once a day at bedtime. This line of treatment has been followed with most satisfactory results until, at the present writing, the patient is able to walk some, has a good appetite, the abdominal tenderness is gone. the indurated mass in the Douglas cul-de-sac almost entirely reabsorbed, the uterus more movable, ovarian tenderness still present on the left side, and menstruation regular.

I desire to call attention to the markedly ecchymotic condition of the abdomen as a rare symptom in cases of hæmatocele, and which, in the case above recorded, passed away in the ratio as did the retro-uterine hæmatocele. I cannot do better in describing this symptom than to use the words uttered by Professor John Bartlett in a discussion of the subject before the Chicago Gynæcological Society,* in which he said, "before closing I will take occasion to mention a symptom of hæmatocele, which would seem to be as rare as it is suggestive. In one case, associated with this condition, I observed the whole surface of the abdomen below the navel, to present an ecchymotic appearance as from the extravasation of blood after an injury. The patient was alarmed at the 'black and blue' appearance, regarding it as a sign of 'mortification.' It existed for weeks and disappeared, *pari passu*, with the pelvic extravasation." In my patient this ecchymosis was present during about three months of her illness.

AN OPERATION FOR THE RELIEF OF TINNITUS AURIUM AND OBSCURE CASES OF DEAFNESS.

BY FRANK G. L. CONNELL, A. M., M. D., AURIST TO THE WEST END DISPENSARY, DETROIT.

Isadore B., a laborer, æt. 40 years, came under my care in June last for the relief of a constant singing noise in his ears, which rendered him too deaf to hear conversation in any but a very high tone. He had suffered for years and had been treated thoroughly by means of the Pulitzer and other methods, but no treatment had thus far given any relief. He could not hear the ticking of a watch unless it was held against the ear, and both ears were alike deficient in usefulness. Examination with reflected light showed the membrane of the tympanum on each side slightly more opaque at the point where it blends with the manubrium of the malleus than I had ever noticed in such cases. On holding the nose and inflating the eustachian tube during the act of deglution it was apparent that air passed readily through the tube to the cavity of the tympanum. As a means of relief in such cases I had in mind the operation of incision of the membranum tympani as first advocated by Sir Astley Cooper, but in this case I thought best to modify this operation and carry my incision around one side and end of the handle of the malleus so as to liberate almost entirely that organ from its attachment to the membranum tympani. My patient was then directed to hold his nose and blow, when the air was observed to stream through the incision, demonstrating that the section had been made complete, as Cooper advised. The disagreeable noises in his ears ceased at once, and his hearing became so acute that he had no trouble whatever in hearing my voice in ordinary tone.

I believe in many cases the cause of the roaring noise and hard hearing is due to inflamma-

* Chicago Medical Journal and Examiner, Vol. liii, No. 4, p. 398.

tory infiltration of the tissue of the membranum tympani in the vicinity of its attachment to the handle of the mallus. This infiltration made the membrane firmer, and its movements in consequence of aerial vibrations are stronger and more readily conducted to the sensory nervous apparatus of the ear. The operation I have here proposed cuts off the excessive vibrations of the tympanum from the handle of the malleus, yet leaves attachment sufficient for the purpose of normal hearing.

Correspondence.

IODOFORM AS AN ANTISEPTIC.

In the choice of an antiseptic surgical dressing the general practitioner is often in a quandary as to which he shall select. When he requires one, his mind recalls carbolic acid, corrosive sublimate, and the "ines" that crowd the advertising pages of the medical journals. When one is selected and used, the surgeon is often alarmed to find after his most careful and close attention that his patient shows signs of septicæmia, pyæmia, etc.

Prof. Tait, of England, has shown in the most remarkable success attending 112 consecutive ovariotomies, the antiseptic properties of absolute cleanliness, both before and after the operation, hot water being the germicide used during the operation.

If the surgeon's judgment is good he will select such dressings as have the known power to destroy the disease-producing germ, and at the same time not destroy the vitality of the tissues with which it is brought in contact.

Iodoform, as an antiseptic dressing, has with me proved to combine these requisites in the most satisfactory degree. As a topical case of a large wound, dressed exclusively with iodoform, I mention G. S., male, æt. 28, laborer, married, strumous taint. In assisting to move a house, a large chain broke, and in the recoil the end hit him on the left leg at the upper part of the lower third of the tibia, producing compound, comminuted fracture of both tibia and fibula, and lacerating the anterior tibial artery. He was placed in a lumber-wagon and carried to his home, some two miles, where I saw him.

The wound was bleeding freely. Inserting my finger I could feel a number of small fragments of bone. I advised immediate amputation, which was not allowed by relatives until six hours after the accident, when I operated. I prepared the limb by washing well with warm water and ordinary laundry soap, then shaving all the hair off. I amputated about five inches below the knee, making the antero-posterior flap operation, on anterior surface cutting from without inwards, on posterior surface by transfixion and cutting from within outward; all arteries that spurted were ligated, silk being used. Capillary hæmorrhage was controlled by the continued use of hot water, 175° F., until every vestige of hæmorrhage ceased and the internal surface of the flaps had a grayish-white appearance, when they were heavily dusted with iodoform and closed by seven silk sutures, two on each side of the stump and three on the end. The ends of the ligatures were brought out at the upper margin of the flaps, major portion on the external surface of the stump to assist in keeping the drainage open. Iodoform was then dusted into the margins of the flaps and strips of heavy adhesive plaster passed from behind down over the end of the stump between the sutures and above the knee on the front, thus giving firm support to the posterior flap and taking all pressure off the anterior surface. The stump was then anointed with vaseline and covered with absorbent cotton. I did not remove the dressing for 50 hours.

At time of redressing the temperature was 99° F.; found a little blood coming from drainage. Stump was washed with warm (not hot) water, dusted with iodoform and dressed as before. After this the stump was dressed every 24 hours for 17 days, and at no time was there any pus discharged through the drainage, nor did any appear on the margins of the flaps except at points where the sutures were removed and then only once. At no time did the temperature exceed 99.5° F.

On the 32d day after the operation the patient was discharged, the flaps having healed by first intention, solid, except at points where the sutures were inserted, when they filled up in a few days by granulation.

I have in many other cases of minor surgical operations had such pleasant results from iodoform, that I have come to believe it second to none as an antiseptic. I have been disappointed in the action of many of the much-praised germicides. Some are really dangerous, very often giving rise to strong constitutional effects, as in the case of sol. mercuric chloride, 1–2000, when applied freely. Solutions of carbolic acid to do any good would have to be applied in at least a 5–100 solution, and in such strength would destroy tissue.

I have only known of two cases of iodoform-poisoning, and both cases manifested it in acute mania, which subsided upon suspension of application. One was in a child less than five years of age, and the other in a female over 50.

Surgeon G. M. Sternberg, U. S. A., in a series of experiments on antiseptic properties of iodoform found that in strength of 1–500 it would destroy the micrococci of pus, septicæmia, bacteriotermo and organisms found in de-

composing beef-tea, two hours' exposure being required.

JOHN M. FRANCE, M. D.,
Asst. Surg. B. &. M. R. R. R.

BLUE HILL, NEBRASKA.

SYRUP TRIFOLIUM COMPOUND IN SYPHILIS.

Being dissatisfied with the routine treatment of secondary, tertiary, and hereditary syphilis, I resolved on an early trial of syrup trifolium compound.

I had in my family a domestic, aged eighteen, female.

She had suffered with an anomalous (and occasionally severe) form of dysmenorrhœa, since the first appearance of menstruation, four years before, as well as a persistent general itching sensation of the surface of the body.

She had previously resided with an excellent general practitioner near her own home, and both his treatment and mine were of no avail.

Any idea I may have had of syphilis was precluded by the early age of the appearance of the disease, and the virtuous habits of the patient (although this latter does not count for much).

Happening to visit her home in May, 1886, I found that the father had been a soldier in the civil war, and after a sojourn of several months in a hospital, was discharged for "general debility," and had been in a state of chronic ill-health since his return.

My course was now clear. I placed her on the syrup trifolium in drachm doses in the morning, and two drachm doses at noon and evening.

As there was slight habitual constipation and anorexia, I added:

Fl. ext. cas. sagrada, ℥ j.
Tr. gentian, ℥ viij.
Fowler's solution, ʒ j,

in half-ounce dose at morning.

Her next menstruation was comparatively free from pain, and the next normal, when I discontinued the remedy, as the cutaneous trouble was also cured.

The cure remains complete.

I now induced the father to use the remedy, but with entirely negative results, although pushed to three-drachm doses.

In June a gentleman from Ohio called at my office.

His brother contracted syphilis four years before, and, becoming impatient with his physician, committed the common mistake of consulting a charlatan.

About a year ago he became affected with cough, night-sweating, and general emaciation, and discharged three physicians for telling him that his lungs were sound, and his complaint specific, he having an idea that "consumption was eating him up."

As I was only wanted to furnish medicine, I put him on the same treatment, with the addition of nitro-muriatic acid bath (which I also ordered in the case of the girl's father), three times per week.

Afterward they sent for more medicine, stating that the patient was much better.

I expressed them what they wanted, and about a week ago I received a letter stating that he is now well, and enclosing a check for further fee.

I should have reported sooner, only I was waiting to hear from this last case.

G. HENRI BOGART, M. D.

SHARPTOWN, IND.

JEQUIRITY IN TRACHOMA

I see in the AGE of the 25th ult., an inquiry touching jequirity. Jequirity I have found to be almost a specific in trachoma and pannus, which have resisted every other treatment. I have used a solution made by macerating three beans twenty-four hours, well bruised in a wedgwood mortar, with ℥ ii of water, and 15 grs. boracic acid, in some fifteen cases this summer and autumn, with fine results. In some few cases the purulent inflammation had to be set up a second and third time. In not one case which I have treated with this drug have I had any keratitis. I use the solution three times a day with a camel's hair brush by everting the lids. The diphtheritic membrane is generally formed by the third of fourth application and the lids considerably swollen. The number of applications varies from six to ten, generally ten. If the ocular conjunctiva becomes very much injected and the eye sore on gentle pressure, one application of a one-per-cent. solution of eserine is generally all that is necessary. Allow the inflammation to subside without other treatment than cosmoline smeared along the margin of the lids, four times during the day. The pus should be washed from the face frequently to avoid eczema of the same. Other details as to cleanliness are unnecessary. The patient should always be warned of its contagiousness, and when one eye only is being treated prevent if possible the inoculation of its fellow, etc. I have tabulated a list of a few cases which you may have if they would be of any use to you.

DR. W. C. ABALY.

Madison, Wis.

A "Maternity Home for Respectable Unmarried Women" has been established in New York. This is, doubtless, another "long-felt want" in the eastern centre of fashion and refinement. Out in the rowdy west respectable unmarried women have thus far got along very nicely without "maternity homes."

The Medical Age.

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JOHN J. MULHERON, M. D., Editor.

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Editorial.

THE MOSAIC LAWS OF HYGIENE.

The healthfulness of the Jewish race, in spite even of the contaminations of modern life, is a subject of frequent comment. In spite of the apparently unsanitary conditions in which we frequently find the scions of that ancient people in our large cities, their health is manifestly better than that of their Gentile neighbors more favored as to the comforts and necessities of life. The only way to account for this discrepancy must evidently lie in the hygienic laws promulgated by Moses and religiously observed by all good Jews down to the present day. The matter is made the subject of an able and highly-interesting article by Dr. Noel Gueneau de Mussy in a copy of L' Union Medicale, which has come under our notice. In it the writer argues that the hardships and strict disipline to which the chosen people were subjected during the lifetime of Moses developed in them a sturdiness of both physical and mental habit which has been transmitted from generation to generation. He then proceeds to declare the close connection between moral worth and physical well-being.

There is so intimate a solidarity between moral and material interests; the useful is so constantly and so necessarily in harmony with the good, that the two elements cannot be completely separated in hygiene. Moses, without disjointing these elements, gives the pre-eminence and predominance to the moral element —the one which is to direct, adjust and sustain the energy of the organic element.

In observing Israelitic society we find, further, two remarkable characteristics. These are profoundly fixed, by Mosaic institutions, in the habits and instincts of the people. Jews have carried with them and preserved everywhere in their migrations through time and space, these two features: family esteem [*l'esprit de famille*], and the love of work. In the contemporaneous Jewish family, as under the tents of the patriarchs, the head of the family is respected and honored by his children. This respect for parents which, in the Decalogue, is enjoined immediately after the respect and worship of the Divinity, is the essential condition of the family and assures its stability. It is the bond which unites its members and associates them with the same interests, just as respect for the Diety binds together and consolidates each family with all the others. The family is in fact the primordial element and the foundation of society, and in regulating the latter, Moses began at the foundation. This *esprit de famille* is a vital motive among the Israelites, and to it they owe a portion of their force in the world. A trait not less remarkable is the love of labor. "Thou shalt gain thy bread by the sweat of thy face," is the law to which no exception has been made. Further on we find in Exodus, Leviticus and Deuteronomy, "Thou shalt work during six days and rest upon the seventh." Observe in all the quarters of the earth how the Jews work. Like others of the Semitic races, they love commerce, banking, the arts and the sciences; they do not like manual labor so well, but it is unjust to believe that they refuse it or have no aptitude for it.

As to the love of work among the Jews, it is of course the chief source of their wealth and their consequent enjoyment of the comforts of life. There are no beggars among them, and the sons of the wealthiest capitalists of the world would blush to live an idle and useless life.

If the obligation of work may be considered as one of the fundamental precepts of the Mosaic hygiene and legislation, the Decalogue in consecrating it imposes also a measure which is not less in harmony with hygienic laws—the the working on six days and resting on the seventh. In Mosaic as in Christian culture a portion of this weekly repose is given to religious rites and this is one of the reasons why certain individuals have opposed it. This opposition is, however, wholly unjust, for even from a purely human point of view the Sabbath day repose is *par excellence* a hygienic, as it is certainly an essentially moral law. And if the Diety is but an ideal abstraction of the good, the true and the beautiful, is it a matter of no moment that man be drawn toward it from time to time? Again, from a material point of view, the wise interruption of work is conformable to the laws of our nature, and we find that the most industrious and productive nations of the earth, as Great Britain, America and Holland, are those whose observance of the Sabbath is most vigorously carried out.

Moses was not satisfied in thus laying the broad foundations of a social hygiene. He entered into the most minute details of hygienic law, and compels our admiration of the accuracy of his observation and the wisdom of his precepts. For alimentation he carefully indicates the animals to be sacrificed. The idea of

parasitical and infectious maladies which has acquired so large a place in modern pathology strongly preoccupied him; it dominates all of his hygienic ordinances. He particularly excludes those animals, such as swine, which are the most likely to be invaded by dangerous parasites. The hare and the rabbit, which are open to the same reproach, are also interdicted. Again, it is through the blood that the germs and spores of the majority of infectious maladies circulate. Moses directed that animals be bled before killing them for alimentary purposes. It was ordained also to burn the fat of these animals, and it is precisely the fat surrounding the abdominal viscera and enveloping the lymphatic ganglia which is oftenest a depository for parasitic germs. An animal found dead is declared impure (infectious), and whoever touched one of them was obliged to submit his person and his garments to strict purification.

The Talmud, which is a commentary upon the Mosaic law, and whose prescriptions are regarded as having the same authority, not only takes account of the kind of animals used for food, but of their state of health, and the sacrificers are directed to examine their lungs, liver, spleen and intestines. Animals were considered improper for alimentation whose lungs were adherent to the sides, even when these adhesions were the result of an affection of the sides alone. Such animals must be rejected even if the adhesions exist only between the lobes of the lungs, and must always be condemned if the sacrificer establishes the presence of grains or pustules (*boutons*) disseminated upon the surface of the lungs. The lung must be insufflated and the expansion of the organ must be complete before the animal is accepted. Whenever the sacrificer finds, in following this proceeding, a rupture of the lung from which air escapes, he is obliged to regard the flesh as impure. To avoid the possibility of error in this investigation the lung must be insufflated under water. If there is a rupture, the escaping air will form bubbles upon the surface of the liquid. The water must be neither hot nor cold in order to avoid such retraction of the tissues as would momentarily close any opening which might exist.

What an extraordinary prescience is this! The contagium of tuberculosis has been demonstrated in modern fashion for a few years only. The transmissibility of the malady by alimentation is not even now accepted by all, despite conclusive researches. The Mosaic law in reality anticipated modern science by several thousand years. Its inscribed precepts included laws established for the prevention of tuberculosis. If these adhesions of the lungs to the sides, or of the lobes to each other, may at times be due to other causes than tuberculosis, that disease is certainly the most common cause of the adhesions. And if adhesions may be met with which do not contain tubercles, we very rarely meet with tubercles without adhesions. The Mosaic method was an easy and practicable one, well within the comprehension of the ignorant. For a more perfect security, the law declared that even in the absence of adhesions, animals must be rejected as impure whose lungs showed papules upon their surfaces. The word papule is the translation into common language of the word tubercle. The connection of adhesions with caries of the sides, does not do away with the suspected significance of the matter, for if caries of the bones may exist independently of the pulmonary tubercules, modern researches, notably those of NÉLATON and LANNELONGUE, have proven that these forms of caries are almost always of tuberculous origin. Physicians will read with astonishment of the ancient use of the delicate proceeding of insufflation under water, a process we now employ to establish the fact of rupture of the organs—ruptures consecutive, in the great majority of cases, to tuberculous lesions.

The formal obligation to wash the hands before eating, was evidently inspired by the thought that dangerous material might adhere to the skin and enter the digestive organs with the food. The precept was the more important from the fact that in the time of MOSES fingers were used instead of forks at table—a custom still prevalent among the Arabs.

This fear of the elements of contagion, this prophetic intuition of the presence of microbes, we find also in the hygiene of houses and garments. Here is what we read in Leviticus (Ch. xv., v. 35–45): And he that owneth the house shall come and tell the priest, saying: It seemeth to me *there is* as it were a plague in the house: Then the priest shall command that they empty the house, before the priest go *into it* to see the plague, that all *is* in the house be not made unclean; and afterward the priest shall go in to see the house: And he shall look on the plague, and, behold, *if* the plague *be* in the walls of the house with hollow streaks, greenish or reddish, which in sight *are* lower than the wall, then the priest shall go out of the house to the door of the house, and shut up the house seven days: And the priest shall come again the seventh day, and shall look; and, behold, *if* the plague be spread in the walls of the house, then the priest shall command that they take away the stones in which the plague *is*, and they shall cast them into an unclean place without the city; and he shall cause the house to be scraped within round about, and they shall pour out the dust that they scrape off without the city into an unclean place: And they shall take other stones, and put *them* in the place of those stones; and he shall take other mortar, and shall plaster the

house. And if the plague come again, and break out in the house, after that he hath taken away the stones, and after he hath scraped the house, and after it is plastered; then the priest shall come and look, and, behold, *if* the plague be spread in the house, it *is* a fretting leprosy in the house; it *is* unclean. And he shall break down the house, the stones of it, and the timber thereof, and all the mortar of the house; and he shall carry *them* forth out of the city into an unclean place. The picturesque expression, "a fretting leprosy in the house," refers to those cryptogamic products which may be observed upon walls in damp localities, in cellars for instance, and in rooms on the ground floor of houses. They show themselves under the form of grayish or greenish bubbles or essera which raise and destroy the coating of the walls, leaving round, whitish depressions. They are generally grouped in circles or curved lines resembling in appearance the plaques of certain forms of psoriasis or *lepra vulgaris*. MOSES knew the dangerous character of these formations, for he forbade the people to dwell in houses containing cryptogams. He knew them to contain spores which would propagate and thus destroy those who absorbed them, for he ordered that the scrapings of these walls be thrown out of the city. Again, if the cryptogams were reproduced, the house was to be destroyed and all its material and dust taken outside the city.

MOSES regarded the spots which appeared upon the skins or tissues of garments from the same point of view. He ordered methods of cleansing and, in case the appearances returned, the clothing was to be destroyed (Leviticus xiii., v. 47 to 59). This is perhaps the first time in history that we find clothing incriminated as being liable to serve as a vehicle for morbific principles.

The salubrity of the air being one of the most important points of hygiene, MOSES directs the Israelites to choose a place outside of the camp for the satisfaction of their natural wants. They were obliged to carry in their belts a pointed stick with which to make a hole in the earth to receive their dejecta, which afterward covered with the earth (Deut. xiii., v. 12 and 13). VOLTAIRE mocks at this ordinance; he did not comprehend its admirable wisdom. We perceive in it the idea of disinfection, by means of the soil, of the putrid matters of the dejecta.

MOSES found the practice of circumcision established in his race since the time of ABRAHAM, and directs its continuance. It has been stated that ABRAHAM borrowed this custom from the Egyptians. The statement is thought to be supported by the authority of HERODOTUS, who had observed the custom in Egypt. But, as stated by DR. BOUISSON (Dict. Encyclop. V. XVII.), HERODOTUS wrote 900 years after MOSES, and the Egyptians were probably inspired by the example of the Israelites, as is affirmed by several historians. The custom renders less easy the transmission of contagious maladies produced by sexual relations, and it is asserted by Israelites that the practice prevents those pruriginous affections which may become a cause of irritation and of vicious habits. These conditions which are often dangerous, are extremely rare among them. In the hygiene of women there is a point of capital importance—the regularity of the catamenial function, which should be accomplished in calm repose. A large number of the affections appertaining to the utero-ovarian apparatus may be referred to imprudence committed during the menstrual period. The congestion which precedes and accompanies the periodic flux appears to be connected with ovulation. If the catamenia are, as has been stated, accouchments in miniature, we know that fatigue, strong emotion, and all excitements should be severely interdicted during this period. Nevertheless, the education and the exigencies of modern society take no account of this matter. Most women do not make any change in their habits; they take long promenades, dance, travel and ride horse-back quite as they were in a normal condition. MOSES, however, affirmed and enforced a proper respect for the catamenial period. During its continuance the woman was oblieged to remain sequestrated. In order that all excitation might be avoided which would react upon the utero-ovarian organs the husband was directed not to cohabit with his wife, he must not be seated in proximity to her, and must not even touch her. In the severity of these precepts MOSES shows his knowledge of human nature. To gain his result he was obliged to go beyond the really necessary limit of precaution, and this was especially necessary with a people who were ardent and impassioned. He also provided for those cases in which the flux was of unaccustomed abundance or duration, or occurred apart from the natural periods.

The excessive penalties which the Hebrew legislator imposed for the infraction of his ordinances were due to the fact that he was dealing with a sensual, half savage people, impregnated with superstitions, and tainted with the debaucheries of Egyptian life. To draw them away from these, and to raise them to an ideal conception of Divinity, it was necessary to impose with inexorable rigor these laws which were founded upon the most elevated spirituality and the purest moral sense. In order that his work might be accomplished and become permanent, it was necessary to do away with all that might corrupt his people or cause them to deviate from the right paths. Hence, to prevent idolatry he forbade, under pain of death, the making of images of men or of ani-

mals. The methods employed by MOSES in going, in his laws, beyond the end to be attained, insured its attainment. It would be unjust to judge the penal legislation of MOSES from the point of view given us by modern ideas inspired by a Christion civilization. The severity which seems to us exaggerated did not appear such to the former slaves of the ancient Egyptians. After all, in our time we find some severe punishments; a soldier who strikes an officer suffers death.

The best proof that MOSES understood his work is that the edifice which he reared remains standing. This work has beheld the centuries defile before it—it has defied the assaults of time. It has now become admirably completed in the ordinances of Christianity. It has become penetrated with a new spirit and an expansive character which embraces the world, though MOSES, in order to give his work the force and cohesion necessary at the time of its origination, made it, for a period, exclusive or restricted. It is from the reverberations of SINAI that MOHAMMED drew all of his laws which were possessed of any moral grandeur. Thus the religion promulgated by MOSES was the root and base of the two great civilizations of the present day.

In its primitive form also, this work still exists, and those who live by it, dispersed according to the prediction of the great legislator to the four quarters of the earth, have drawn from it a force and a vitality which has enabled them to triumph over all obstacles and over the persecutions of which they have been the object.

It would be natural to suppose that MOSES was inspired by the knowledge that he had acquired through intercourse with the priests and savants of Egypt. But the principles of his legislation were so different from those recorded of other nations, that he would have been obliged to modify their laws profoundly before permitting them to enter into the strong and homogeneous unity of its work. The originality of this work witnesses to whom it should be attributed, and from whatever point of view we may regard it, in considering the immense part played by the great legislator of Israel, and the indirect influence that he exercises upon the civilized world, it is difficult not to see in him one of those providential men placed by the Creator in the pathway of humanity that he might direct men and lead them toward the end he has fixed.

MODERN TREATMENT OF CONSUMPTION.

The treatment of pulmonary consumption has been materially modified by the acceptance of the Koch doctrine, and it is high time that practitioners should manifest a little consistency in the matter of treatment. You may know of a man who prates of the bacilli and infection of tubercle, and of the numbers of cases he has known when the wife contracted the disease while nursing the husband, and *vice versa*, yet that same man will insist in treating the disease with tonics, cod liver oil, anodynes, and climate. He will never make the first move to destroy the bacilli. This is wrong. To be consistent and in accord with the best sentiment of the day, we should treat pulmonary consumption cases with disinfectants and antiseptics. These agents should be prepared so they can be easily carried into the lungs with the inspired air. Inhalers capable of doing this work should come generally into use. A very simple one consists of two tubes, half to three-fourths of an inch in diameter, and four inches long. These are passed through a cork large enough to fit an ordinary tubler. One is pushed down so as to terminate near the bottom of the tumbler beneath the liquid to be vaporized and inhaled. The other tube projects from the cork, and is used as a mouthpiece. The tumbler is now half filled with hot water, a solution of some antiseptic and disinfectant is added, the mouth-piece is taken by the patient, and air inhaled through it. This air, of course, passes through the hot water, and becomes impregnated with the antiseptics, etc., held in solution or suspension as in the case with some of the essential oils possessed of antiseptic properties. The lungs are thus easily reached, and the ravages of the bacilli may in some cases be checked. At least this much may be done. The suppurating surfaces may be washed and cleansed, the same as pyogenic surfaces may be treated in other parts of the body. The stomach is left to do its work of sustaining the animal economy with food, and is not embarrassed in such efforts by the presence of nauseous medicines and powerful irritants.

When one reflects that fowls have often been observed to die of consumption after eating the sputum expectorated by phthisical patients, the necessity for the destruction of all expectorated matter becomes apparent. The use of antiseptic inhalations, doubtless, in great measure does this, but we should go a step further, and collect the sputum in a wide-mouthed and narrow-necked vessel, in which it can be easily and cheaply destroyed by drenching it with strong sulphuric acid.

THE INFLUENCE OF CASCARA SAGRADA ON THE DIGESTIVE SECRETIONS.

The virtues which were discovered in cascara sagrada, through the empirical use of the drug, were so pronounced as to attract to it the attention of the physiological experimenters, and although nothing new has been recently ad-

vanced the evidence that the original claims for this tonic laxative were well founded is rapidly accumulating. Dr. Tschelzen, who has studied cascara sagrada experimentally, has arrived at the following conclusions, which he publishes in the Journal de Médecine de Paris:

1. Cascara sagrada is efficacious when a prompt cathartic action is looked for.

2. It acts as a purgative only after it has been introduced into the stomach; when injected into the skin or into the vessels it does not cause an intestinal evacuation.

3. It does not increase the salivary secretion.

4. It causes an increase of the secretion of the gastric juice which is often continued during the process of digestion; it increases also the biliary and pancreatic secretions.

All these effects have been obtained when the remedy has been introduced into the stomach.

When it is injected into the vessels, animals undergo partial and often fatal callapse. The blood-pressure is rapidly decreased, even after partial dissection of the pneumogastic.

Dr. Thompson has employed the extract of cascara in more than 300 cases, administering a dose of 5 centigrams combined with 10 centigrams of berberis aquifolium, in pill form, in the morning and evening, against habitual constipation. The remedy preserves its activity even when its use is continued through several months.

Dr. Landousk has stated that the laxative effect of the powder of the bark can be obtained with a dose of 25 centigrams, and permanent effects are obtained when this dose is given three or four times a day for a few months.

FLUID EXTRACT GRINDELIA ROBUSTA.

Dr. Dobroklonsky, of St. Petersburg, has, under direction of Prof. Botkin, made a number of experiments on different animals with a view to determining the physiological action of grindelia robusta. He gives the following as his results as published in the Pharmaceutische Post, Sept, 11, 1886:

1. Fluid extract grindelia robusta decreases the number of heart contractions and increases the blood-pressure.

2. The irritability of the different nervous centres of the heart and of the vessels is diminished.

3. As a result of clinical observations, the therapeutic action of the remedy is due to the diminution of the number of heart-beats, during which the heart action becomes more regular.

In some cases where one remedy does not sufficiently regulate the action of the heart a combination of two heart remedies is recommended, an especially valuable combination being adonis vernalis and fluid extract grindelia robusta.

The Deutsche Medizinische Zeitung of St. Petersburg, has the following communication bearing on the same subject:

For some time it has been observed, in St. Petersburg, that the fluid extract of grindelia robusta showed disagreeable incidental effects, such as burning in the stomach, diarrhœa, etc., and an investigation made by Dr. Dobroklonsky proved that instead of the American fluid extract of grindelia robusta before used in such cases, most of the apothecaries prepared an extract of their own. The samples taken from different apothecaries proved an adulteration of the extract with resin, thus furnishing another illustration of the care necessary in the selection of the preparation of a new drug.

Notes.

Medical News: During the late war, at a period when the success of the Union cause was pretty well assured, President Lincoln was invited by some distinguished engineers of the army to inspect a plan which had been drawn for a very elaborate and expensive system of defence for the City of Washington. After examining the drawings attentively he inquired what was the necessity for the works. "The defence of the capital," was the reply, "in the contingency of a Confederate invasion." The President thereupon was reminded of a story of a debating society of a western town, where the question was discussed: "Why does a man have breasts?" Several nights of debate failed to elucidate the problem, until the matter was submitted to a referee, who decided: "That if, under any circumstances, however fortuitous, or by any chance or freak, no matter of what nature, or by what caused, a man should have a baby, there might be breasts to nurse it."

In the Vienna hospitals some form of tuberculosis is found in nearly 70 per cent. of the deaths. The treatment of acute diseases is generally expectant, and in typhoid fever, milk and other liquid diet is used. Previous to 1879, when the city obtained its water from the Danube river, typhoid fever was almost epidemic in Vienna. In that year they put up new water works, and since that time not one case has developed in the city. A bacteriological laboratory is connected with the pathological department, and cultivations of bacteria are made from typhoid fever, pneumonia, erysipelas, glanders, septicæmia and other diseases, Experiments with bacterial cultures are made upon lower animals. Nearly every depart-

ment of the hospital now has a bacterial laboratory, and the search for new forms and confirmation of already discovered bacteria goes on with enthusiasm.

The father of DEMOSTHENES was a blacksmith, of EURIPIDES a dealer in vegetables, of SOCRATES a mediocre sculptor, of EPICURUS a shepherd, of VIRGIL an inn-keeper. COLUMBUS was the son of a wool-carder, SHAKESPEARE of a butcher, LUTHER of a miner, CROMWELL of a brewer, SIXTUS V of a swineherd, LINNÆUS of a poor country minister, FRANKLIN of a soap-boiler, ROUSSEAU of a watchmaker, and MURAT of an inn-keeper. The mothers of these men may have been the source from which their genius was derived, and indeed it is known that some of them were women of more than ordinary excellence.

The Medical Record, with all its usual weight of utterance, argues that a long beard is incompatible with a good physician, and backs up the assertion with reference to all the medical worthies from GALEN down. We expect, therefore, there will never be a general harvest of facial capillary throughout the land, for it is a fact that the American doctor has a weakness for long beards. What a pity that the hair from the chin cannot be transplanted to the summit of the cranium! Eh, BROTHER SHRADY?

The controversy over free trade and protection has burst the confines of the commercial world and has extended to medicine. DR. WEYMOTT TIDY, the distinguished English sanitarian and writer on medical jurisprudence, shows that while the population of England and Wales is steadily increasing, the agricultural products, owing to foreign competition, are diminishing, until England now raises only one-half of her own food. DR. TIDY maintains it to be an unhealthy condition when a nation cannot maintain itself.

A French court recently rendered a decision which is of considerable interest in connection with vital statistics. A physician refused, in a suit against a life insurance company, to testify as to the illness from which his patient died, and the court sustained him in his position, holding that the physician must be the sole judge as to whether the nature of the illness came under the cover of professional secrecy. The extension of this ruling to the matter of the reports of mortality required in some municipalities, would cause confusion.

DR. WHITTAKER, of Cincinnati, is credited with the saying that "a bald-head and bay-window abdomen are important qualities by which to succeed in gynæcology." We have known even this unique combination to fail The statement is a libel on women. True femininity is in closer sympathy with true virility, than it would imply.

Book Notices.

THE PHYSIOLOGICAL, PATHOLOGICAL, AND THERAPEUTICAL Effects of Compressed Air. By Andrew H. Smith, M. D., late Surgeon to the N. Y. Bridge Co. (Caisson Work), Physician to the Presbyterian Hospital, New York, etc.

PRACTICAL GUIDE IN ANTISEPTIC MIDWIFERY IN HOSPITALS and Private Practice. By Henry J. Garrigues, A. M., M. D., Professor of Obstetrics in the N. Y. Post-graduate Medical School and Hospital. Visiting Obstetric Surgeon to the N. Y. Maternity Hospital, etc.

THE MODERN TREATMENT OF ECZEMA. By Henry G. Piffard, M. D., Clinical Professor of Dermatology, University of the City of New Nork; Surgeon to St Elizabeth's Hospital, etc.

SPINAL IRRITATION (Posterior Spinal Anæmia). By William A. Hammond, M. D., Surgeon-General U. S. Army (Retired List); Professor of Diseases of the Mind and Nervous System in the N. Y. Post-graduate School and Hospital, etc.

These four little volumes are the latest instalments of The Physician's Leisure Library, published by GEO. S. DAVIS, of Detroit. We took occasion in our notice of previous numbers of this series to express our opinion of the excellent taste and judgment exhibited in the selection of the authors who have contributed to it, and the numbers before us but increase our appreciation. A more convenient and cheaper form of presenting the choicest fruits of the best minds in the profession has not yet been devised, and the physician who fails to possess himself of them neglects an opportunity seldom presented. It is scarcely necessary to specialize on the merits of works bearing the names of the authors, with all of whom the reading physicians of this country are thoroughly familiar.

DR. SMITH'S experience in the class of cases furnished in the construction of the New York Caisson has afforded him facilities seldom enjoyed, and his therapeutic deductions are of special interest in connection with the recent introduction of the pneumatic cabinet in the treatment of pulmonary affections. No general practitioner can afford not to be thoroughly familiar with this method of treating a class of cases generally included in the list of non-curable diseases, and there is no writer on the subject who has so concisely and distinctly covered the subject. The physician who neglects to invest twenty-five cents in this treatise does both his unfortunate patients and himself a great injustice

Antiseptic midwifery is now the fashion, and "one might as well be out of the world as out of fashion." No one has a more profound respect for nature than we, and no one has a greater dread of "meddlesome midwifery," so called. It must, however, be borne in mind that natural labor is scarcely to be looked for in the environments of modern life, and it follows that intelligent art must be resorted to to meet the evils which are so apt to follow in the wake of artificial habits The results of antiseptic midwifery are two conspicuous in institutions in which septicæmia is peculiarly prone to supervene in the puerperal state, to excuse the slightest doubt of its efficacy. Dr. Garrigues has, in the briefest possible limits, given the most comprehensive consideration of the whole subject.

Dr. Piffard is too well known as a dermatologist to necessitate any commendation of anything which he may write on his special subject. Eczema is the most common of the skin diseases, and withal one in which error of diagnosis and treatment are most common. In the brochure on the subject before us the chief clinical varieties are pointed out; their etiology is clearly exhibited; and the principal remedies which the author's vast experience has led him to prefer, together with the best method of applying them, are distinctly described.

Spinal irritation is one of the affections of modern life, or, at least, it has of late years been distinctly differentiated from the vague affections peculiar to the modern woman. A perusal of Dr. Hammond's pamphlet will convince the reader that it enters into and complicates her nervous affections to an extent not very generally recognized by the general practitioner. The author treats the subject in both its non-practical and its practical bearings, with his characteristic lucidity and force. His style is both entertaining and impressive.

Witthaus' Laboratory Guide in Urinalysis and Toxicology.

New York: Wm. Wood & Co.
Detroit: Phillips & Hunt.

This is gotten up in convenient form, one page of each leaf being left blank. This will be a god-send to poor medical students who do not wish to spend their beer money for note-books.

The size and shape of the book are also convenient, being such that it can easily be carried in the pocket, and is so bound as to lie open on the desk, without requiring the aid of two acid bottles; this property of the binding enables the docile student to follow out Prof. Witthaus's first sentence of instruction—to keep everything in its place.

We approve of most of the methods which the Professor has described in the Guide. But we must say that the test he gives for albumin, —Esbach's method—is no better, and, indeed, we think not near as good as the old test with heat and nitric acid. The old test has been used with uniform success for years, and there is no valid reason why cranks should try to impose another one on us. We suppose, some day somebody will attempt to dispute the name of iron, and substitute another one of his own invention. If the heat and nitric acid test for albumin were not perfectly reliable, it would be well enough to search for another test; but as long as it has never failed, it seems idle to attempt to confuse the mind with a multiplicity of formulæ.

Another thing which we wish to mention is the exclusive use of the metric system throughout the whole work. Metric weights and measures are all well enough in their place and should be learned by every scientific person, but the medical practitioners of to-day were not instructed in their use, and this fact should not have been lost sight of by a man who has lectured on chemistry as long as has Prof. Witthaus. This is the United States, and not France; France has given us the Statue of Liberty, but she has no right to force upon us the use of her metric system. The practitioners of to-day have no time to bestow upon estimating the value of the metric terms in ordinary English. It is very nice to think of a metre as being a certain part of the earth's quadrant, but the overworked physician has no time for the calculations required.

Medical Progress.

The Use of Kava Kava as a Diuretic.—I first noticed the diuretic properties of kava kava nearly two years ago, when I commenced using it in gonorrhœa.

Among the cases recorded in my note-book are the following:

Case 1.—Charles W., aged twenty-seven, United States, in the steamship business. Family history good. Patient states that three days ago, while attending to his duties, he was suddenly seized with a chill and headache, and toward evening commenced vomiting. Yesterday he first noticed that his ankles and legs had become swollen; he also noticed that he was compelled to make water frequently, and that only a small quantity passed at a time.

When I was first called to see him, Nov. 2, 1885, his legs and feet were greatly swollen. He was also quite weak, and suffered somewhat from dyspnœa. Abdominal and thoracic viscera were normal. Temperature, pulse, and respiration were normal. The urine presented a dark, smoky appearance; amount, seventeen

ounces during twenty-four hours; it contained albumen, nearly seventy-five per cent.; sp. gr. 1 08, blood, epithelial casts. As the patient was complaining bitterly of headache, I administered a hypodermatic of $\frac{1}{10}$ gr. pilocarpine. In a few minultes the drug began to show its physiological action, and in a short time he was covered with a profuse perspiration. The patient was placed upon milk and Vichy water; also to take thirty minims of the fluid extract of kava kava in half a glass of water, every three hours.

Nov. 3. Patient, during the preceding twenty-four hours, has passed nineteen ounces of urine; chemical and microscopical appearances same as at last examination. He still complains of the pain in his head, but says it is not so severe as it was yesterday. He has not vomited since the evening of the 2d, and his bowels have moved three times. Ordered forty minims of kava every three hours.

4th and 5th. Patient feels a little better. Has passed twenty-one and twenty-five ounces respectively; the urine is clearer, and the albumen amounts to about thirty per cent. (by volume).

10th. Up to the time of the present note the patient has been gradually improving. The amount of urine passed is between thirty-five and forty ounces; albumen, about fifteen per cent. As he has been suffering intensely from odontalgia for the past two days, and was unwilling to have his teeth drawn except while subjected to an anæsthetic, he was this afternoon put under the influence of nitrous oxide, and three of his teeth were extracted.

11th. Patient is sitting up to-day, and is feeling quite nicely. During the preceding twenty-four hours he passed thirty-seven ounces of urine. The albumen is slightly increased, probably due to the anæsthetic administered yesterday. Sp. gr. 1.020. Treatment continued.

16th. Patient up and about his room. He has passed, during the previous five days, two hundred and forty ounces—an average of forty-eight ounces per day. The swelling of his feet has disappeared, and also the swelling under the eye-lids. The urine is clear, and contains about five per cent. of albumen. He has passed, since last note, from forty-five to fifty ounces per day. Sp. gr. 1.021. His appetite is good, and he is feeling much better. He was advised to continue taking the kava kava regularly for a month or six weeks—the dose to be ten minims in water, three times a day.

Dec. 3. I examined patient's urine, sp. gr. 1.027. He is passing from forty-seven to fifty-one ounces a day. The dropsy has entirely cleared up, and he is feeling quite well, with the exception of being a little weak. He left for the south to-day.

In a letter received from him about the middle of April, he writes that he is feeling better than he ever felt in his life. He has gained ten pounds in weight. His urine is free from albumen. He is passing from forty-eight to fifty-three ounces per pay, of a sp. gr. 1.022. He has not taken any medicine since February.

Case 2.—JENNIE M., aged thirty-five, single, United States, a type-writer by occupation. Ill nourished and confined closely to office. When seventeen years old, patient suffered from scarlet fever. While recovering from this, she noticed that her feet and legs were becoming swollen, and also that her stomach and abdomen were increasing in size, so that she was obliged to let out her clothes. All these symptoms disappeared in a short time under treatment, when she resumed her employment. One week ago, while at work, she was taken with vomiting, which was followed by pain across the loins, and her feet and legs commenced swelling. She also suffered from headache. Her urine had been scanty for a long time.

I was called to see the patient October 6, 1885. Found her legs and feet much swollen. She was suffering also from hydroperitoneum. Her urine was scanty, of a smoky color, and loaded with albumen, fifty per cent.; it also contained blood, granular, and waxy casts. Complete anorexia. She complained of a dull, aching pain over the lumbar region. She suffered from constant nausea, but seldom vomited. She was ordered forty minims fluid extract kava kava in half a glass of water, every four hours; and a pill containing two grains citrate of iron and quinia three times a day. She was also ordered to drink as much fresh milk as possible with Vichy water.

Under this course of treatment the hydroperitoneum and anasarca of the lower extremities gradually diminished, and the quantity of urine passed during the twenty-four hours increased from twenty-nine ounces on date of my first visit, to fifty-one ounces on November 29th. The sp. gr. on October 6th was 1.018, and on November 29th, 1.022. The urine is much clearer, and the albumen amounts to about twenty-five per cent.

The treatment has been continued up to the present note, when I diminished the fluid extract kava kava to half the quantity—twenty minims to be taken three times a day.

Dec. 20. The patient has recovered sufficient strength to go about, and is feeling quite comfortable. Her urine still contains a small amount of albumen. She is passing from forty-eight to fifty-one ounces a day. Her appetite is good, and she feels sufficiently restored to return to her occupation She will report occasionally, and bring specimens of her urine to be examined. She will take for the present five drops of the tr. ferri mur. three times a day. The kava kava was discontinued December 1, 1885.

Case 3.—HENRY Z., lawyer, aged thirty-one. Born in England. Father died of apoplexy. Mother still living and enjoying good health, being eighty-five years old. Patient has been in good health until three years ago, when he was confined to bed by rheumatism, which lasted two weeks. He was attended by a homœopathic physician, who informed him, after he was able to go out, that his heart was not affected. To use the patient's language, he has "never fully recovered from this sickness." Shortly after this attack of fever he went south and remained until last December, when he was called home on account of business. At this time he was feeling better than at any period since his illness. About two months ago he began to notice that he was a little short of breath, which difficulty troubled him the most when he was addressing a jury. As he was busy, he found no time to take rest. He also noticed that his feet and ankles were a little swollen at night on reaching home, and that he was obliged to sleep with his head quite high.

I first saw the patient March 13, 1886, when he came to consult me about the symptoms narrated above. Upon examination, I found that his feet and ankles were moderately swollen; slight hydroperitoneum. Examina- showed that the heart was hypertrophied; the apex beat was hard, and felt the strongest in the fifth intercostal space and a little more than one inch to the left of the nipple line, and a mitral regurgitant and an aortic direct and regurgitant murmur were readily heard. His temperature was normal. Pulse 110. His urine was quite clear, and contained merely a trace of albumen; no casts; acid; sp. gr. 1.020, and he was passing thirty-three ounces in the twenty-four hours.

Patient was ordered milk, Vichy water, and infusion of digitalis ʒ ij every two hours.

March 15. Patient feels about the same. The digitalis caused so much stomach disturbance that he omitted it for the preceding twenty-four hours. Thinking that the stomach trouble was, perhaps, due to other causes, I ordered two minims fluid extract digitalis in water three times daily. At the end of forty-eight hours, however, he was suffering as much as ever from his stomach, and I had to omit the digitalis. His condition was about the same, with the exception that he did not suffer from shortness of breath. He was ordered to take ten minims of fluid extract convallaria majalis and forty minims of the fluid extract kava kava in half a glass of water every three hours; to continue on with the milk diet; and in addition, to take ʒ ij of whiskey three times a day.

22d. As to-day was quite warm and pleasant, my patient accompanied me around part of my route. He says he can go up and down stairs slowly. He does not suffer from dyspnœa. The swelling is entirely gone from his feet and ankles. His appetite is good, and he is able to lie down at night. I stopped all medicine; but a few days later he called at my house complaining of slight dyspnœa and a little swelling about the ankles. I ordered five minims of the kava kava and five minims of convallaria majalis three times a day.

April 3. Patient was able to return to his office to-day, and to attend to light office business.

May 25. Met patient in court to-day. He informs me that he is feeling very well, and that this morning he made an address in court, nearly three hours in duration. He is still taking the medicine. He sleeps well, and his appetite is good.

Case 4.—Was asked to see, in consultation, a young lady, sixteen years of age, who had had scarlet fever three or four weeks ago. The attack was quite mild, and she was confined to bed less than ten days. Up to this present attack the patient had always enjoyed good health. I found her very weak. She had great swelling of her feet and legs; was passing but a small quantity of urine per day, which was loaded with albumen. There were complete loss of appetite and some headache. She was put upon milk, and forty minims of kava kava in half a glass of water every three hours, and ten drops of tr. ferri mur. three times daily. In the course of a few weeks, as I am informed by her mother, the œdema entirely disappeared, her appetite became good, and she went back to school.

The fluid extract of kava kava can be given in doses of from five minims to a drachm, repeated every three, four, or six hours, according to the result desired. The preparation which I have used is the fluid extract prepared by Parke, Davis & Co., whose fluid extracts are arranged to represent one grain for each minim.—Dr. Herbert C. Rogers, in *Medical News*, Oct. 16, 1886.

Urinary Casts, Their Formation and Significance.—There are two principle types of casts: the blood and the hyaline; in connection with the latter there is a large modification, as may be seen by a single glance at the following table:

CASTS.

Blood.
Hyaline.
Epithelial.
Nucleated.
Finely Granular.
Coarsely Granular.
Fatty.
Tubular.
Cork Screw.

The *blood cast* is simple, and easily understood. It is produced by an exudation of all the constituents of the blood, and a matting together and entanglement of the blood corpuscles by fibrin elements in the lumen of the uriniferous tubules, so that they are discharged from the tubes in masses, representing perfect casts of the same; they are found in the urine as little plugs of blood corpuscles with parallel sides and rounded ends. This variety is only met with in acute congestion, hemorrhagic infarctions, hematuria, acute diffuse nephritis and acute exacerbations of the chronic diffuse nephritis. The presence of blood casts in the urine is the only positive evidence of hemorrhage from the kidney. Their presence alone does not indicate organic renal disease. Some call the hyaline, with a number of blood corpuscles attached to them, blood casts, but this is erroneous. Blood casts are not common.

The *hyaline cast* is not so thoroughly understood, but it is generally believed that a peculiar fibrinous substance is thrown out of the blood into the uriniferous tubules, and when discharged from the same, independent of the epithelial cells, it is known as a hyaline cast, but with attached epithelial corpuscles, in various stages of retrograde change, the various forms tabulated are produced.

A single cast of this variety may be found in urine without indicating any renal lesion. But their continuance in any appreciable number always does.

By an *epithelial cast* is meant one in which the epithelial corpuscles are attached to, or implanted, in this hyaline plug, and have been separated from the basement membrane, while still retaining the appearance of renal epithelial cells. Casts of this kind are usually found in the acute parenchymatous metamorphosis, and in the acute diffuse nephritis, or in connection with acute exacerbations.

The *nucleated cast* is one in which the protoplasm of the epithelial cells has been obliterated, and only the nuclei can be recognized as

they adhere to or are implanted in the hyaline substance. The inability to recognize the protoplasm is caused by the cells becoming infiltrated with fine particles of effete material and the imbibition of an albuminous fluid until everything is indistinct but the nucleus.

This form of cast is met with in the acute parenchymatous, and diffuse lesions, and acute exacerbations, and indicates a still greater retrograde change than the epithelial cast.

The *finely granular cast* is one, in which the epithelial cells are not only cloudy, but are also infiltrated with fine granular particles, some of which are oil globules of minute size, and others granular detritus probably from incomplete products of tissue metamorphosis drawn from the blood, and in part from the further destruction of the epithelial protoplasm itself.

This form of cast represents a still greater destructive change, and is met with in a well-established acute lesion, or in the commencement of a chronic lesion.

The *coarsely granular cast* is simply one representing a more advanced degree of the former process, with more abundant and larger fat droplets, and a still greater destruction of the epithelial protoplasm.

This form is met with at the end of an acute lesion, but more frequently indicates a chronic parenchymatous or diffuse lesion.

The *fatty cast* is one in which the metamorphotic process has almost, if not completely, destroyed the protoplasm of the epithelial corpuscle, which has been replaced by fat droplets of varying sizes, and now easily recognizable as fat. This cast may have a large or small diameter, but usually the former.

This form indicates an advanced stage of the chronic parenchymatous or diffuse lesion.

The *tubular cast* is a rare variety, and is formed by a plug of hyaline matter in the lumen of the uriniferous tubule, and a thin ensheathing layer of the same material behind the epithelial cells, and in this manner the corpuscular elements are detached from the basement membrane and discharged. They appear under the microscope as a perfect ring of epithelial elements. Occasionally the central plug will be observed protruding from one or the other extremity.

This variety might be considered as a curiosity.

The *cork screw cast* is produced by a twisting of the body of the cast, upon its own axis, so that it resembles the spiral of a cork-screw. This opinion is based upon numerous sections of the kidney that show this peculiar arrangement in the straight tubules, some of which have the casts still lodged in them.

Some believe that all forms of casts (the blood, hyaline and tubular excepted), can be, and are frequently formed by the transformation, desquamation, and matting together of the epithelial cells without the aid of or the presence of this fibrinous or hyaline material. This may be the case in a few instances, but in the vast majority the hyaline material forms the basis of all casts. In either case the microscopic appearances are the same.

The peculiar arrangement of the tubular form looks a little as if the hyaline material clogged, so to speak, the protoplasm, and aided in cutting off the nutritive supply and prevented the free exit of the effete material from behind, thus enabling that which should come through, to push the cells from their attachment to the underlying basement substance. This view of the situation distinctly indicates the necessity of keeping the tubules well washed out in all forms of nephritic disease, in which there is a tendency to the formation of casts.

It is the belief of some, that the hyaline material undergoes degeneration, and in this way they explain the various forms of granular casts. A close examination, however, of a hyaline cast, which appears to be a little granular, will almost always, with a good high-power lens, show incomplete and faint outline of what once was an epithelial cell. This tends to sustain the former view, and to disprove the latter.

The *waxy cast* of some writers is not included in this classification, as its existence is extremely doubtful, and probably never occurs.

It occasionally happens that the various crystals of the urine adhere to these hyaline plugs, or to a cast, and from their parallel sides might be termed crystal casts. They are, however, more likely to be seen in sections made from the kidney itself.

The distinguishing character of all casts, is that they have uniformly parallel sides, and usually at least one rounded end, occasionally the other end is broken at a right angle, or a little irregularly, but they never terminate in imperceptible lines, as is the case with bands or streaks of mucus. Casts and strings of mucous are often confounded; but by remembering the above-stated facts, the one should never be mistaken for the other. If the observer will compare the diagrams of casts as seen in the books with specimens of ropy mucus from the bladder, the difference is at once apparent.

Casts are very important aids in diagnosis. They are found in acute and chronic parenchymatous metamorphosis of the kidney, in acute diffuse nephritis, and in the chronic diffuse group. They are rarely found in the sclerotic, gouty and waxy kidney when uncomplicated.

Small casts of the hyaline, epithelial, nuclear and finely granular variety are found in the acute lesions, and in the early stage of the more chronic forms. Large hyaline, coarsely granular and fatty casts indicate an advanced lesion.—Dr. W. H. Porter, in *Quarterly Bulletin*, Oct., 1886.

Inhalations of Muriate of Cocaine in Whooping-cough.—In the Medical Record of July 31st, we find a résumé of the most modern methods of treatment for this disease, embracing a brief notice of the remedies used by several German, Spanish, French, and Brazilian practitioners of distinction, with reported results as late as the present year; each claiming for some particular agent, specific virtues in modifying or curing this intractable and distressing malady.

Whilst the remedial agents employed by these gentlemen differ materially in their therapeutic results and topical effect, their use has obviously been predicated upon the theory that the disease is purely a local one, and amenable to local treatment only. Hence we find insufflation through the nostrils, sprayings and pencilings to the throat and pharyngeal surface, the principal methods adopted for the

topical application of these remedies. In one instance only have we observed the practice of inhalation mentioned, and that of Dr. P. Sertoli reported in the Revista Clinica é Therapeutica, of June, 1886.

This writer extols the effects of iodoform and spirits of turpentine in whooping-cough, and claims that by the use of these remedies through inhalation he was able to diminish both the frequency and severity of the attacks. In January last I had under my care two cases of pertussis, one a child of five, and one of two years of age. The children were seen, one in the second and the other in the third week of the attack, both suffering with all the distressing phenomena incident to a full development of this disease. Many of the ordinary and some extraordinary remedies had been used without in any degree mitigating the severity of the paroxysm. Sympathizing with the unhappy mother, as well as the little sufferers, I resolved to employ, if possible, some hitherto untried agent that in my judgment might afford immediate relief. With this view I determined to try the use of hydrochlorate of cocaine by inhalation, and in order to procure it in a form sufficiently volatile to be readily vaporized, selected chloroform as the solvent. A six-per-cent. solution of muriate of cocaine in chloroform was prepared, and ten minims poured in a wine-glass made warm by tepid water was placed under the patient's mouth, whilst the mother was directed to keep the nostrils closed. No difficulty was experienced after a few trials in getting the patient to breathe in the vapor, which seemed to produce rather an agreeable effect than otherwise. This practice was repeated every four hours, and, whenever it was possible to do so, immediately preceding or at the outset of a paroxysm of coughing, in the latter instances using double the dose of the solution. It was found that by this means many of the paroxysms were arrested entirely or materially cut short, and, although the treatment seemed to fail in curing the disease or shortening the usual period occupied by its three stages, it certainly altered and mitigated the severity and distress of the paroxysms.

The present epidemic of whooping-cough in Washington, which commenced in the month of June, has afforded me ample opportunity of multiplying my experiments with the use of the chloroform solution of cocaine, the result of which has confirmed the conclusions, of its marked effect, arrived at with my first two cases in January. Some difficulty is usually encountered in administering the remedy by this method with very young children, in which event the ten or twelve drops may be poured upon a handkerchief, which can be substituted for an inhaler, the latter instrument being easily managed by elder children.

Whilst I am aware of the popular theory which attributes the origin of pertussis to the presence of specific micro-organisms or parasites, and recognize its power of self-propagation and contagious character, I am inclined to regard it as entirely a neurosis, tracing the initiatory morbid impression or manifestation to those nerves which are distributed to the laryngeal mucous surface, resulting at first in functional disturbance of the vaso-motor nerves, impaired innervation and local irritation; that this condition, although resembling in its pathological and physical features ordinary catarrhal affections of this organ, is essentially different and due to some specific cause, is shown by the fact that ordinary laryngitis and bronchitis are never attended with the pathognomonic spasm of whooping-cough. The additional evidence of its nervous origin and complications, especially with the pneumogastric, may also be found in the distressing vomiting which accompany the paroxysms of coughing. The hyperæsthesia, hyperæmia and turgescence of the mucous lining of the larynx and trachea, consecutive to and consequent upon the primary nervous disturbance, in the second stage, is followed by a metamorphosis of cell products, copious secretions and slight tissue changes. The bacteria, micrococci, and other organisms found in these secretions, are in my opinion the *post hoc* innocuous products and not the causative agents, of the disease. The "contagium vivum," or materies morbi has not yet, in my judgment, been clearly demonstrated. The fact that infants have been born with whooping-cough contracted during fœtal life, would seem to show that the cause producing this disease is not always extraneous. Taking into consideration the local manifestation of this disease with the morbid conditions which we find in the lining membrane of the upper air-passages, in connection with the known action of cocaine upon the terminal extremities of arteries and nervous filaments, we are forced to acknowledge that it possesses in an eminent degree the power to fulfil the indications presented in the treatment of whooping-cough.

Topically applied to the inner surface of the larynx and trachea, the sentient nerve filaments are temporarily benumbed or anæsthetized, the peripheral arteries are diminished in calibre and secretion greatly checked, whilst the lining membrane of the larynx is reduced in vascularity. No other remedy yet suggested possesses the capacity to exercise in so potential a degree these several therapeutic desiderata. —Dr. A. Y. P. Garnett, in *Jour. Amer. Med. Ass.*

Milk and its Therapeutical Applications.—*Apropos* of peptones, it may be useful to our readers to present a brief synopsis of Dujardin-Beaumetz's views regarding milk and its therapeutical employment. In his "Therapeutic Conferences," now in course of delivery at the Cochin Hospital (Bull. Gén de Thérap , July 15, 1886), he offers some practical suggestions which, although not new, may, nevertheless, be useful to many. As regards the contamination of milk, he holds that medicaments and poisons in plants pass in great part into the milk. In this way the alkaloids of the solanaceæ may render milk poisonous. That iodide of potassium and the iodides generally, salicylic acid, arsenic, etc., may thus contaminate the milk of nursing mothers is certain. Brouardel and Pouchet have communicated to the Medico-Legal Society an instance in which the death of an infant was occasioned by arsenic in the milk of the mother, who was taking large doses medicinally. Syphilized infants have been treated through the milk with mercury by administering mercurial preparations to the nursing mother. In this

way also quinine has been successfully given to an infant suffering from intermittent fever.

If medicaments may be thus transmitted, why not the poisons of typhoid, tuberculosis, and syphilis? As regards the typhoid poison, he thinks the water added to the milk is the vehicle rather than the milk itself. There can be no doubt that the bacilli of tuberculosis are contained in the milk of tuberculous cows in large numbers, but it is not proved that in this way the human subject is affected.

DUJARDIN-BEAUMETZ then passes in review various milk products, as whey and cheese, and next considers certain drinks obtained by fermentation. *Kefyr* is prepared in the mountains of Caucasus, and consists of cows' milk which has undergone fermentation by the addition to it of *gefyr grains*, which consist of a microbe—*dispora Caucasica*—that has the remarkable property of transforming lactose of milk into alcohol and carbolic acid. *Oïdium lactis*, on the other hand, changes lactose into lactic acid merely.

Under the name *Galazyme*, SCHNEEP has described a fermented milk which is prepared by the addition of sugar and a special ferment. Various modifications of this process have been proposed, consisting in the most part in the addition of different kinds of sugar and brewer's yeast. The *koumiss*, so called, which is now so commonly dispensed is nothing more than Schneep's galazyme.

The fermented milks are usually well borne, especially by the stomachs of chronic alcoholics. By reason of the presence of alcohol and lactic acid they possess tonic and digestive properties; the carbolic acid lessens pain and vomiting.

Our author makes some very interesting observations on the administration of milk in various diseased states. The quantity to be given daily ranges from two to three litres (67 to 101 fluidounces). MAUTEL has shown that three litres suffice to maintain the nutrition at the normal; below that amount the weight declines. As regards digestibility, it is found that 500 grammes (nearly one pint) pass out of the stomach in an hour. REICHMANN'S results (Zeitschrift für klin. Med , 1885, Vol. ix.) differ from those arrived at by DUJARDIN-BEAUMETZ, for the former asserts that 300 cubic centimetres require three hours to pass out of the stomach into the intestine. These two observers are also opposed as respects the relative digestibility of boiled and crude milk, REICHMANN maintaining that boiled milk is the most digestible, and DUJARDIN-BEAUMETZ that there is really no difference. PINARD asserts that prolonged boiling favors the digestion of milk by peptonizing it in part.

As a diuretic milk is a valuable remedy in cardiac dropsy. As both an aliment and a diuretic it is much used in the treatment of catarrhal and intestinal nephritis. Easy of digestion, making little demand upon the resources of the stomach, and promoting digestion by the formation of lactic acid, it is an important remedy in ulcer of the stomach, gastric catarrh, gastritis, etc. Having constipating properties, it is exceedingly useful in the treatment of diarrhœa and dysentery.

DUJARDIN-BEAUMETZ does not accept the view of DONKIN that sugar of milk is not contraindicated in diabetes. Of other objections to its employment, he mentions dilatation of the stomach, in which it is objectionable by reason of its bulk, and in certain cases of acidity of the stomach, in which it is not well borne.—*Am. Jour. Med. Sciences.*

THYMOL AS A TÆNIFUGE.—In an article in the Buffalo Medical and Surgical Journal for Oct., 1886, the following notes regarding this new application of thymol appear:

DR. VANNI, in the first case of tænia treated by thymol gave three grammes (gr. xlv.) in divided doses through the day, and twenty grammes (℥ v.) of castor oil at night, but succeeded in obtaining only five or six segments of the worm. On the following day, however, he administered six grammes (℥ iss.), of thymol, divided into twelve doses to be taken every fifteen minutes, and at the end of the third hour the entire worm including the head, was expelled.

I adopted the following method with my first case: In the evening I ordered twenty grammes (℥ v.) of castor oil to be taken fasting; in the morning I prescribed eight grammes, (℥ ii.) of thymol divided into twelve doses, one to be taken every quarter of an hour; twenty minutes after the last dose had been swallowed another twenty grammes (℥ v.) of castor oil were taken. A few minutes after, a tænia medio-canellata three and a half meters in length was evacuated, the head being dead. To be sure, I had no SHULTZE'S table with me to prove that there was no movement, but I touched the worm repeatedly with a hot coal, and observed no sign of life.

It is very important during the administration of the thymic acid, to give the patient some cordial and stimulant; cognac, rum and alkermes will be found suitable. Thymol is very depressing according to the experiments of HUSEMANN, and this will explain its action on the nervous system. Even with small doses the pulse becomes small and frequent, the respiratory movements slow, and the temperature is lowered. These effects, however, are easily and promptly counteracted by the use of stimulants.

I must call attention to another fact, HAUSEMANN and LEWIN says that thymol should be administered in small doses. On account of its caustic action, they claim that there is danger of producing digestive disturbances and gastro-enteritis. They recommend two or three teaspoonfuls of a one-half-per-cent. solution during the day. While it is true that we can never be too prudent in the practice of medicine, these doses are too fearfully homœopathic, when we consider that eight grammes of thymic acid may be given in two hours and a half without producing the least gastro-intestinal disturbance.

I may be criticised for offering this new anthelmintic to the profession on the ground that there is no occasion for new remedies of this class. In reply, I would state that no specific tæniafuge has yet been discovered. The number of remedies recommended prove that none are reliable. The tæniafuges have left the physician and gone to the druggist, who sells his infallible vermifuges as he does his hair restorers. We have only to ask any old practitioner about the use of anthelmintics to learn that this class of remedies is exceedingly unre-

liable. Most of these remedies, moreover, produce grave gastro-intestinal disturbances and we are not surprised that BAMBERGER questioned which had done mankind most harm, the tape-worms or the tæniafuges. But the time spent in clinical researches is not wasted even if we arrive at negative results, and although my observations are as yet limited, I would respectfully recommend to the profession the use of thymic acid as a tæniafuge.

1. Because this remedy, with the exception of a depressing effect, easily counteracted, produces no disturbance of the stomach or intestines.

2. On account of the rapidity and simplicity of its action compared with other remedies, which require courses of treatment, divided into three periods, the preparatory, the expulsive, and the consecutive.

3. On account of the advantages it offers of being both a tæniacide, and a tæniafuge.

4. Because in case of an error of diagnosis the remedy would produce an efficient purgation and disinfection of the alimentary canal.

5. Because it is reasonable to suppose that since thymic acid succeeds in expelling the tænia medio-canellata, the worm which above all others resists the action of anthelmintics, the same remedy will be of service in expelling all other varieties of flat worms.

6. Because we have, as yet, always been successful with the use of thymic acid and have probably found a real specific, which up to the present day did not exist.

NOTHNAGEL ON THE TREATMENT OF PERICARDITIS.—PROF. NOTHNAGEL, of Vienna, in a clinical lecture on the treatment of pericarditis, advises that in cases where there is pain in the cardiac region, fever and the commencement of exudation, leeches varying in number from three to ten, according to the gravity of the symptoms and the constitution and strength of the patient should be applied. The leeches should be renewed every four or six days. Cupping may be substituted, but leeches are preferable. An ice-bag should be applied, or a directing apparatus through which cold water can be constantly supplied to the part. Cold compresses are of no use unless they are laid on ice, and then they must be changed every five minutes. Digitalis for internal use is indicated under certain circumstances. It is useful if the cardiac action is greatly increased, especially if there are signs of the heart muscle becoming implicated, when it should be given in somewhat larger doses. Digitalis is not desirable in the earlier stages of the disease, but in the later ones, when there are signs of weakness of the heart muscle and the pulse is weak, it is indispensable. Other internal remedies are useless. Mercurialisation—viz., calomel in small doses, of three-quarters of a grain internally, and grey ointment externally—has no effect. The pain is scarcely ever severe, and if it is persistent it may be relieved by cold and blood-letting. To this a high temperature is no drawback, as the fever subsides as the inflammatory appearances disappear. If effusion has begun, other means must be used—such as counter-irritation of the skin and the promotion of the reabsorption. Ice and blood-letting are of no use in this case. The cardiac region must be painted with equal parts of gall and iodine tincture, or an ordinary cantharides plaster may be applied, which should be kept on from eight to twelve hours till a blister is raised. This is of greater use in subacute than in acute pericarditis. Digitalis does not directly promote reabsorption, but indirectly by its influence on the action of the heart. Should the patient's life be threatened by copious effusion, paracentesis of the pericardium must be performed. This operation is often employed, and with not unfavorable results. Great care must be observed; the pointed trocar of DIEULAFOY'S apparatus must not be used, but a blunt one like that of DR. FRAENTZEL.—*London Lancet.*

THE TREATMENT OF EPILEPSY.—DR. W. M LESZYŃSKY, in the Quarterly Bulletin for Oct., 1886, thus summarizes his experience in treating sixty cases of epilepsy in the New York City Lunatic Asylum:

In a number of instances where previous attacks had been known to have occurred, the administration of an emetic, followed by a brisk purge, had frequently proved successful in aborting the attack.

In some cases in the beginning the convulsions may be controlled by the administration of large doses of chloral *per anum;* but, after the attack has fairly started, chloral seems to have very little influence, excepting to intensify the exhaustion.

The inhalation of chloroform controls the convulsions during its application, but they are only held in abeyance, to return with apparently renewed vigor shortly after the inhalation is discontinued. The use of morphine subcutaneously seems to possess some power in controlling the paroxysms, but it has to be injected in such large doses that it appears to have hastened the death of the patient from exhaustion.

In some cases pressure over the carotid arteries seem to have temporarily checked the convulsions at their onset.

Where marked cyanosis is present, I have found venesection of the greatest benefit, at once relieving the passive cerebral and pulmonary congestion. At the same time the ice-cap and counter-irritation to the nucha had been resorted to with apparent advantage.

Owing to the frequency of dysphagia, and occasionally the complication of severe vomiting, the nutrition and stimulation of the patient when death from exhaustion becomes imminent, are very difficult.

Our only hope then remains in the administration of nntritive and stimulating enemata.

Nitrite of amyl, in this class of cases, has proved ineffectual, if not injurious.

The use of this drug is undoubtedly valuable for the purpose of aborting a paroxysm in cases of ordinary epileptic seizures where a distinct aura is experienced, but after the convulsion is established its administration invariably complicates matters.

AN IMPROVED METHOD OF MEDICATION.—If the physician of the last century, who made his infusions and decoctions, and pills, in his

own private laboratory, could be restored to the practice of his profession at the present day and have at his command the variety of medical preparations, in concentrated and palatable form, that the enterprise and skill of pharmacists have introduced, he must feel as if his occupation were gone, or certainly that portion of it which had to do with the preparation of medicines. The improvements in pharmacy have been so many and so important that we doubt if there are many physicians to-day who have kept pace with them, and who are fully informed regarding the preparation of drugs and methods of administering them acceptably to patients, and yet given equal opportunities and equal medical acquirements that physician who applies in his practice the improved methods pharmacy has provided, and is constantly adding to, reaps the largest share of pecuniary success.

Since the discovery of the subcutaneous method of medication many drugs have been prepared in forms which admit of their being administered hypodermically. The convenience and accuracy of this method must grow to be more generally appreciated, and we doubt not it will in time supersede, in many cases, the exhibition of medicine per os. The improvements in hypodermic syringes and the manufacture of a sufficient variety of tablets to meet the requirements of practice has given a further impetus to the hypodermic method. It will be gratifying to our readers, therefore, to learn that Messrs. Parke, Davis & Co., with their characteristic prompt recognition of the demands of the profession, now offer a very complete line of hypodermic tablets, which they supply in small glass tubes, convenient for carrying in the pocket or medicine case, each tube containing 25 tablets. For the convenience of physicians, they have also devised a pocket-case, containing an improved hypodermic syringe especially adapted for the use of these tablets and six tubes of tablets. Any formulæ which physicians may desire, and which can be made into tablets, will be manufactured to order. We believe this method of medication cannot fail to become more and more popular as its advantages grow to be appreciated.—*Southern Med. Record*, Sept., 1886.

Deep Injections of Yellow Oxide of Mercury in Syphilis.—Dr. Shapek gives in the Proceedings of the Kieff Medical Society, an account of some observations made in Prof. Stukovenkoff's clinic on the employment of yellow oxide of mercury injections, in the condylomatous stage of syphilis. The solution used was prepared by rubbing up sixteen grains of the oxide with twenty of gum arabic, and an ounce of water. The injections were made not hypodermically into the subcutaneous tissue, but, according to a plan recommended by Prof. Smirnoff, of Helsingfors, the needle, which was four or five centimetres in length, being plunged almost vertically into the gluteal muscles. In three cases five injections were given; in one case, four; in one, six; and in one case, ten injections were administered at intervals generally of a fortnight; a grain of the yellow oxide being introduced each time by means of two separate punctures on opposite sides of the middle line. In some cases, however, half a grain was injected weekly. The writer found these injections well borne by patients, only very slight local signs of irritation being induced, and in many cases none at all. In one case there was a hard swelling as large as a nut, but it was not painful, and soon passed away. The mercury, too, was always very quickly absorbed, being detected in the urine in four of the cases after the lapse of twenty-four hours from the first injection, and at the end of forty-eight hours in the other two cases. Dr. Shapek remarks that this method is inexpensive, simple, and efficacious, and will probably be found particularly useful in what in this country would be described as club, union, and dispensary practice.—*The London Lancet.*

Contribution to the Study of the Ferruginous Preparations Employed Hypodermatically.—Dr. Hirchsfeld has made hypodermatic injection of iron preparations the subject of an elaborate essay, historical, physiological, and therapeutical (Bull. Gén. de Thérap., July 15, 1886). In his historical summary, which is quite complete, he has not overlooked the contributions of Americans, and has referred to the paper of Da Costa. The first experience in his practice was that of Rosenthal, of Vienna, which was made in 1872. Since that time numerous observations and experiments have been reported, on the whole favorable to the practice. But Hirchsfeld says: "Our results and conclusions do not coincide with those of the partisans of the hypodermatic method. We entered into the investigation without preconceived ideas, and we publish our conclusions as they were reached." The most important fact disclosed in the investigation thus far published, is the following:

"On examination of the blood, the number of red globules had sensibly diminished—a fact which had previously been observed both in men and in animals as a result of the hypodermatic injection of iron."

No conclusion has been reached as to the preparation most suitable for administration subcutaneously. The preparation of Rosenthal has been used more frequently, probably, than any other. This is obtained by dissolving the pyrophosphate in a solution of citrate of soda. In a half hour after the injection of this salt, iron may be detected in the urine.—*Amer. Jour. of Med. Sci.*, Oct., 1886.

Jequirity in Trachoma. — Dr. W. F. Southard formulates as follows the results of his experience with jequirity:

1. The freshly powdered bean acts fully as vehemently as the solution, though in some cases, perhaps, the effects are not felt as quickly.
2. The croupous membrane is formed fully as rapidly as after using the solution.
3. The powder clears the cornea of pannus fully as effectively.
4. The pain may be as severe from the use of the powder as from using the solution.

5. Should spots of trachoma be left after the first application of the powder, it can be reapplied in from six to ten days, thus localizing its action.

6. Its permanent effects are the same as those produced by the solution.

7. It appears to be much the safer remedy, for it does not seem necessary to limit its use to old trachomas with pannus.

8. Attention is especially directed to the fact that great caution is necessary in using this remedy, in any form, on account of the unexpected and somewhat alarming constitutional effects sometimes produced.—*Pacific Med. and Surg. Journal*, October, 1886.

Trouve's Electric Sound for Foreign Bodies.—M. Pollailon gave an account before the Académie de Médecine of an operation which he performed on a man who swallowed a tablefork. There was some difficulty in detecting the exact position of the foreign body; palpation and the introduction of an œsophagean sound gave but little result, but the sound of M. Trouve, to which is attacted an electric bell, solved the difficulty. An incision was then made from the ninth rib of the left side, a quarter of an inch from the costal cartilage down towards the umbilicus for three inches; the peritoneum was opened, and the anterior wall of the stomach was drawn to the abdominal opening and incised to the extent of an inch, the fork was seized with a forceps and easily withdrawn, the wound was ligatured with catgut, and the stomach abandoned, the external incision was treated in the ordinary way, and the patient did well.—*Med. Press and Circular.*

Seventy Cases of Rheumatism Treated by Antipyrine.—Dr. Jolebiewski, while attached to the military forces in Dresden, has observed the effect of antipyrine in 70 cases of rheumatism. He places its action on an equal with acid salicylic. The action was in general very prompt. The average duration of the disease in the above recorded cases was three to four days. He thinks it best to begin with large doses—60 grains night and morning. This dosage was not strictly adhered to when the patients were very weak and thin, or when there were complications with other diseases—a much smaller amount then being given.

Antipyrine proved as much a specific as salicylic acid in chronic as well as acute cases. There was no case of collapse. In only two of the 70 was there urticaria. The amount of perspiration varied extremely with different individuals. Nausea was quite often observed, especially when taken near meal times.—*Va. Med. Monthly.*

Ichthyol in Rheumatism.—Dr. Bubelir has been using ichthyol in the Moscow Military Hospital in rheumatic cases, both of an acute and chronic type, with success. This substance is obtained from mineral oil, and is rich in sulphur. It is applied, after careful washing and drying of the affected part, either in the crude form or as a compound sulphate of ichthyol and soda or ammonia, and at the same time is given internally in the form of drops or pills, the dose being from 15 to 25 drops of the sulphate of ichthyol and ammonia, or a similar quantity made up into from six to twelve pills. In all cases the pain was relieved, but the swelling was not affected, so that the author thinks that the drug must only be used in the expectation of relieving pain. He warns his readers, too, that where the external applications are carried on for a long time, or without the necessary precautions of washing, a pustular eruption is liable to occur.—*Lancet*, Oct., 1886.

Cotoine in Diarrhœa.—In the Therapeutic Society, July 21, M. Huchard read a note on the therapeutic properties of cotoine, or the extract of coto, a plant found in Bolivia. It is exhibited in the dose of two to three grains for adults in various forms of diarrhœa. It may be given in powder, in the form of an alcoholic extract or as a tincture. The wine of coto may also be made by macerating for six days an ounce of coto bark in a liter of Malaga wine.

M. Huchard gives the coto in powder, preferably in doses of three grains, with markedly favorable results in tuberculous and various other forms of diarrhœa.—*Le Progrès Médicale.*

Piscidia Erythrina in Obstetrics.—Lessona (Gazetta delle cliniche, February, 1885) reports upward of 100 cases in which he administered this drug, either in threatening abortion or during the first stage of labor. Prompt relief of excessive pain was experienced in 71 per cent. of the cases. For the sake of comparison, opium was given to 96 other patients, with a similar result in 80 per cent. of the number.—*N. Y. Med. Journal.*

Naphthalin as an Anthelmintic.—Dr. Coriander, of Samarkand, recommends naphthalin as a valuable and economical remedy, especially in country and military practice, for worms, both tænia and ascarides. He gives children of from one to three years of age two or three grains twice a day. In the case of adults he gives from 20 to 80 grains a day in powder with sugar.

Menthol in Nasal Reflex Neuroses.—Dr. Rosenberg, of Berlin, recommends the application of gelatin bougies containing one-sixth grain of menthol, for the relief of reflex neuroses due to nasal disease.—*Pacific Record of Med. and Phar.*, Oct., 1886.

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WOUNDS OF THE HEART.*

BY HAL C. WYMAN, M. D., SURGEON DETROIT POLYCLINIC, ETC.

For the purpose of ascertaining how long an animal might live after a penetrating wound of the heart, and also for the purpose of studying the mechanism of death resulting from such wounds, I made the following experiments on anæsthetized dogs and cats: The instruments used were of two kinds, about the length of an ordinary knitting needle, and measured a sixteenth of an inch in diameter. One had a tapering, sharp, round point; the other had a cutting point flattened on each side. The one instrument makes a perfect punctured wound—crowding the tissues one side and lacerating them as they roll up to resist advance of the instrument. The other instrument makes a small incised wound, which was slightly dilated by the rounded part of the instrument. A medium-sized dog had the cutting instrument, just mentioned, thrust through his left side in a direction to insure its passage through the heart. The hand on the handle of the instrument felt plainly the violent movements of the impaled heart. The needle was now quickly withdrawn and the time noted when the expiration was made. Respiratory movements speedily became rapid, a convulsion soon ran through the muscles of the animal, and three minutes after the wound was inflicted the action of the heart could not be detected. An autopsy (?) was now begun. The chest was quickly opened. The pericardium was found moderately distended with blood, which, on opening the sac, was found to proceed from a wound of the right coronary artery An effort was made to reach the cavity of the right ventricle by passing a probe along the wound made by the needle, but failed because the different layers of muscle fibres, contracting in different directions, had distorted the channel of the wound. During this attempt to pass the probe the heart muscle was observed to contract spasmodically, showing that the vital energy had by no means left the heart, although too little remained to carry on the circulation of the blood. Further examination showed that the needle had transfixed the right ventricle and the left auricle and had advanced into the left lung in which a small amount of free hemorrhage was found in the larger bronchi. This animal lived three minutes after receiving the wound of the heart. Death resulted from two conditions, shock, and hemorrhage from the right coronary artery, which so weakened the power of the ventricles that they failed to send the blood into the lungs and brain.

A second medium-sized dog was experimented upon in the same way as the one just described, with this exception, that the instrument used to puncture and transfix the heart had the round, tapering point. Time was noted. Sharp cry, and rapid breathing followed the withdrawal of the needle, notwithstanding the anæsthesia. The dog was released from his fastenings while the heart's action rapidly increased in frequency. (I forgot to say that I felt the beating of the heart unmistakably while the needle was transfixing it.) As the anæsthesia passed away his movements became more sudden and incoördinate than I had noticed before in animals coming from under the influence of an anæsthetic. There was a peculiar quickness in the way he moved his head in attempting to walk, which I attributed to the shock of the punctured wound and which reminded me of the case related by Sir Astley Cooper of the young lady who suffered a punctured wound of the finger and in consequence screamed, fainted and died; only my patient did not die. Twenty minutes after the wound was made the dog appeared as well as any dog so soon after anæsthesia. Two hours later he was frisky and drank some water. The following day he ate and seemed well, and twenty hours after the experiment, through some carelessness of the keeper, he escaped from my laboratory. The man said he ran down the street and out of sound and sight with the swiftness of a deer.

A third dog, a little smaller than those mentioned, was punctured through the heart in as nearly the same direction as possible. He yelped and moaned piteously almost immediately after the instrument was withdrawn. His heart beat violently; his mouth and tongue grew pale. His respiration was asthmatic. It appeared that he must soon die. After half an hour he was much easier, and was disposed to be quiet, giving little attention to his surroundings. I thought best to kill him to ascertain how

* A paper read before the meeting of the Wayne County Medical Society, Nov. 17, 1886.

far the wound through the heart could account for the smyptoms, and thrust an awl into the medulla oblongata, causing immediate arrest of the heart and respiratory movements. On opening the chest, I was surprised to find only a small amount of coagulated blood in the pericardium. The right pleural cavity contained some blood, and there was some pneumo-thorax. The presence of coagula in the pericardium, doubtless, embarrassed the heart's action, and made it beat more vigorously. In a few hours more this cause would probably have induced pericarditis.

Two cats now became the subject for research. The pointed needle was forced through the heart of one and quickly withdrawn, the animal expiring almost instantly. The wound was examined, but revealed only a mere trace of blood in the pericardium. It is possible that the sudden death in this case may have been caused in part by the action of the anæsthetic. I could find no wound of nerves or cardiac ganglia. The needle had transfixed both ventricles near their apex. Shock from the wound was probably the main factor in this death.

Cat No. 2 was wounded through the heart with the instrument having the cutting point. She immediately uttered a cry, and tried to escape from her fastenings. The respiration and heart struggled violently. On releasing her she jumped furiously about the room, biting at objects and occasionally vomiting. This violent agitation continued for twenty-five minutes, when she gradually became quiet, and at the end of one hour and eight minutes after the wound was made, the heart's action had ceased. I now opened the chest and neck, exposing the trachea and thoracic viscera. The pericardium was filled with blood, which had coagulated, making a firm clot around the heart. There was, however, no such relative distention of the pericardium, pushing the lung up into the apex of the chest, as we often see in cases of dropsy of the pericardium. There was not enough blood to have caused death by its mere abstraction from the circulation. Nor was the pericardium so distended as compared with what we see in hydrops pericardii as to stop the action of the heart by force of compression. I think the firm resistance offered by the coagula was the cause of arrest of the heart's action, acting on the peripheral branches of the cardiac division of the pneumogastric to increase its inhibitory action, as galvanism or blows increase it. The clots were quickly turned out by laying open the pericardium. An opening was made into the trachea, and through this artificial respiration was carried on, and, notwithstanding the fact that the heart had been apparently dead for five minutes, I succeeded in re-establishing its action by first grasping the heart in my hand and imitating the action of the ventricles by giving them about five short squeezes for every time the lungs were distended by the bellows, used in carrying on artificial respiration.

I could not have made a nicer illustration of the ability of art to establish an artificial circulation of the blood.

These are not all the experiments which I have made concerning the tolerance of the heart for trauma. Some of them suggest already the propriety of emptying the human pericardium of clots by surgical procedures, when we find that the heart resists the first shock of the wound inflicted upon it, and the wound in the walls of the heart is not too large to admit of being closed by muscular action.

It is interesting to observe what a few surgical writers say upon the subject of heart wounds before making any further deductions from the experiments which I have aimed merely to describe. Dr. John A. Lidell says, in the Encyclopædia of Surgery, by Ashhurst: The traumatic lesions of the heart consist of punctured and incised wounds; contusions, lacerations, and ruptures; and gunshot wounds. Formerly, punctured and incised wounds were most frequently met with; at present, however, the lesions from firearms are much more common. Death occurs instantaneously in some of the cases, but in most instances, a brief interval elapses before life is extinguished. A farm hand, aged 18, was accidentally shot in the left breast, July 7, 1878, with a small revolver (calibre, $\frac{22}{100}$ inch). In less than a fortnight he was again at work, apparently well. He continued in good health, performing the ordinary labor of a farm-hand without inconvenience, until August 30, when he was found dead at his work behind a plough, fifty-four days after the accident. The autopsy showed that death had resulted from extravasation of blood into the pericardium and left pleura. The missile was found to have passed through the pericardium, the right ventricle, and the septum, together with the semilumar valve next the septum into the aorta. The explanation of the lodgment of the ball is, that it encountered a well-filled left auricle, and, being spent, it dropped down through the left auriculo-ventricular opening to the place where it was found. The wound through the right ventricle was valvular, and the pericardium, healing quickly here, prevented the escape of blood. This, finally rupturing, from over-distension, death ensued. With needful rest for a time, instead of labor, no reason appears why this young man should not have in reality recovered.

Velpeau mentions the history of a man who was stabbed in the left side. The symptoms which ensued were such that at the time the heart was supposed to have been pierced.

Nine years afterward he died from other causes. The autopsy established the truth of the former diagnosis, as the cicatrix of the wound was found in the right auricle as well as in the pericardium.

Dr. Fischer has collected 452 cases of heart wound, of which 380 ended in death, and 72 in recovery. Death was immediate in 104 cases, while in 370 it occurred after intervals varying from one hour to nine months. There were 44 punctured wounds, with ten recoveries; 260 punctured and incised wounds, with 43 recoveries; 72 gunshot wounds, with 12 recoveries, 76 contusions and traumatic ruptures, with 7 recoveries. In 36, or exactly one-half of the 72 recoveries, the diagnoses were verified by post-mortem examinations held long after the original injuries: and this circumstance affords good ground for supposing that the remaining 36 cases were likewise correctly diagnosed. Fischer also notes the relative frequency with which different parts of the heart were wounded. In 123 cases it was the right ventricle; in 101 the left ventricle; in 28, the right auricle; in 13, the left auricle; and in 17 the apex of the organ. The right ventricle and the right auricle are wounded much oftener than the left ventricle and the left auricle because they occupy by far the larger share of the front or exposed portion of the heart. The statistics collected by M. Ollivier and by M. Jamain support Fischer's conclusions.

Additional examples of recovery from wounds of the heart, which have appeared during the last twelve years, may be found reported as follows: In the London Lancet a case is recorded of the removal of a needle from the heart on the ninth day, recovery ensuing. Dr. C. L. Ford reports a case of heart-wound from a buck-shot, which was successfully treated. In the British and Foreign Medico-Chirurgical Review there is related a case of bullet wound of the heart with recovery; on the twentieth day the external wound was already healed and the cicatrix moved synchronously with the systole of the heart.

Additional examples of long survival after wounds of the heart, which have been noted during the last twelve years, may be found reported as follows: Mr. West in an article on wounds of the heart gives a summary of twenty cases. In one of them the patient lived nineteen years and seven months, after both ventricles had been wounded with a knife.

Dr. S. P. Conner reports a case of a gunshot wound of the heart, wherein both ventricles and the right auricle were involved, and yet the patient survived 3 years, 2 months and 13 days. Stendener, Halle, is quoted as reporting a case of pistol-shot wound of the heart with survival for fifteen weeks. On autopsy a cicatrix was found at the apex of the left ventricle, corresponding to the wound of the pericardium; grains of powder were also found embedded in the substance of the heart. Sir James Fayrer mentions a case of bullet-wound of the heart, with survival for 72 days. The missile was found in the apex of the left ventricle. Tillaux is quoted as having exhibited at the Société de Chirurgie, the heart of a woman who had survived two gunshot wounds for eighteen days, one missile lodging in the left ventricle of the heart. Dr. H. W. Boone relates a case of gunshot heart wound, with survival of thirteen days. A case of stab-wound of the right ventricle of the heart is reported, in which the patient lived five days. Dr. G. F. Dudley reports a case of pistol ball in the heart, in which the patient lived four days.

The symptoms of heart wounds are often very obscure. There may be present in cases of wounds which penetrate the region of the heart, great prostration of the strength with swooning or syncope, a thready, weak, irregular pulse, a feeble and tumultuous action of the heart, præcordial distress and anxiety, with dyspnœa and other signs of hemorrhage into the pericardial and pleural sacs, pallor, cold sweats, a husky voice and excessive thirst, together with a systolic bellows murmur or other abnormal sounds, without establishing anything more than a strong presumption that the heart itself is wounded. But although the traumatic lesions of the heart are not attended by any symptoms that are peculiar to, or characteristic of them, the occurrence or coincidence of most of the phenomena just mentioned, in a case where a patient is wounded in the cardiac region, will render the diagnosis of a cardiac wound highly probable. According to Dr. Fischer's statistics the phenomena which usually predominate in cases of sudden death from this lesion are those of sudden syncope, or collapse; not unfrequently a hurried exclamation or a convulsive gasping occurs; but the popular notion that persons spring into the air when shot or stabbed through the heart, is not supported by the facts.

In the causation of sudden death from traumatic lesions of the heart, there are three important factors: (1), shock; (2), anæmia of the brain and lungs, directly caused by the escape of blood from the chambers of the heart; (3), arrest of the cardiac movement by compression resulting from distension of the pericardium with extravasated blood. Oftentimes in such cases, a necropsy shows the heart firmly contracted and empty, with much extravasation of blood in the pericardial and pleural sacs.

Bell's Surgery, 1804, vol. I., p. 266:

Wounds of the heart and large vessels connected with it, are at all times attended with much danger, nor is the greatest exertion of of practitioners able to lessen it. Of such a

hazardous nature, indeed, are injuries done to these parts, that in every instance we may pronounce that they will terminate fatally, for although we are told in books, of the heart itself being wounded without any fatal consequences having ensued, there is much cause to suspect that these accounts are founded on fallacy or error. We can, however, conceive that the heart may be slightly injured without proving instantly fatal; but even the slightest wound in it must probably at last end in death, for the weakness produced in this manner upon a particular part, will render it very liable to yield to the strong and constant use of this organ; and when once an aneurism is formed in it, it will not fail to proceed quickly to a fatal termination.

The most likely method of preventing this, or at least of delaying it, is to lessen the action of the heart by copious blood-letting; by low diet; keeping the bowels moderately open; and avoiding bodily exertion; if in such circumstances it is possible to save a patient, these will be the most certain means of doing it; at any rate they will tend to prolong life, which in some cases is of so much moment that a few days or even a few hours may be of great importance. The same observations are applicable to wounds in the large blood-vessels about the heart.

In BELL'S day punctured and incised wounds were more common than they are to-day. The dirk which was a common weapon in BELL'S time made a fatal wound when it pierced the heart.

ERICHSEN: Penetrating wounds of the heart are almost invariably at once fatal, from loss of blood and shock to the organ and system. This is especially the case if the cavities are largely opened, or much of the heart-substance be destroyed. But there are many exceptions to this general law of fatality.

JAMAIN has collected 84 cases in which people have lived for considerable periods after having received a wound of the heart. Of these, in 35 cases the right ventricle was wounded, and the sufferers lived from four and a half hours to 23 days. In 19 cases the injury was to the left ventricle; and of these life was prolonged to periods ranging from half an hour in two cases, to six months in one instance. Both ventricles were wounded in five cases, in patients living from one hour to nine months; the right auricle in seven cases, the patients living from seven hours to 20 days; the left auricle in two cases, in which the patients lived respectively one and two days. In many cases the patient has been known to walk or run some considerable distance after the receipt of the injury.

OLLIVIER and SANSON have collected 29 cases of penetrating wounds of the heart, which did not prove fatal in the first 48 hours after the receipt of the injury. On analyzing these, it would appear that the rapidity of death depends greatly on the condition of the wound, and the part of the organ injured. When the wound is parallel to the axis of the heart, it is not so speedily fatal as when in a transverse direction, and wounds of the auricle are more immediately followed by death than those of the ventricle; the irregular contraction of the different planes of muscular fibre that enter into the formation of the wall of the ventricle tending to obstruct the free passage of the blood through the wound, and perhaps to close it entirely. The size of the wound, however, will necessarily influence the result more materially than its direction. Not only, however, may a person live a considerable time after having received a perforating wound of the heart, but there are many cases on record in which life has been prolonged even though a foreign body were lodged in the cavities or substance of the organ. Thus FERRUS relates the case of a man who lived for 20 days with a skewer traversing the heart from side to side; and ROUX, that of a man who lived 21 days with a portion of a file, with which he had stabbed himself, in the wall of the left ventricle. DAVIS and STEWARD found a piece of wood, three inches long, in the right ventricle of a boy, who lived five weeks after the accident happened; CARNOCHAN relates a case in which the wounded man survived 11 days with a bullet deeply lodged in the substance of the apex of the heart; and LATOUR records the case of a soldier who lived for six years after being wounded with a musket-ball in the side, and in the right ventricle of whose heart the bullet was found lodged, lying against the septum.

CHELIUS says: Wounds of the heart are fatal, either suddenly or by the bleeding, or the danger depends upon the contraction of its fibres, if only some of them be divided, on the collection of blood in the pericardum, and on the difficulty of cure from want of rest, and the consequent addition and extension of inflammation. Only slight wounds of the pericardium and of the heart are curable when the inflammation has not been great; at least distinct scars from previous injuries have been observed on the pericardium and on the surface of the heart. Cases, however, have occurred of wounds of the heart which have healed, in which several days after the injury and independent of it, death has taken place, and the bullet been found in the heart.

We presume that the heart is wounded from the direction and depth of the wound. The peculiar symptoms given of this injury are, a more or less severe pain in the region of the heart, extraordinary restlessness, and insupportable anguish; irregular intermitient pulse; cold extremities, cold sweat, and frequent faintings. The bleeding varies as the wound

is superficial or deep; in both cases it may be absent on account of the peculiar contraction of the muscles, especially in oblique wounds. The blood either pours forth externally, or into the pericardium, or into the chest, with symptoms of extravasation and of internal bleeding. Special symptoms of wounds of the pericardium and of the surface of the heart are not describable, and equally indistinguishable are the symptoms of the parts wounded. Perhaps the different color of the blood in wounds of the left and right side of the heart might render a diagnosis probable. The right ventricle is most frequently wounded. Wounds of the arteries are as dangerous as those of the ventricles; in them a small wound may be closed by contraction of the muscular fibres.

Only the most strict anthropological treatment can in these wounds be employed. If extravasation into the pericardium take place, the making of an aperature in it is the only, although very doubtful remedy.

Wounds of the pericardium sometimes occur without injury of the heart, and may be fatal or not.

For the history of cases mentioned in this article, and for much valuable information, I am indebted to the following bibliography:

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Dr. J. J. Mulheron cited two cases of wounds of the heart.

Case 1.—Shotgun-wound. The shock was severe and the action of the heart feeble, frequent and irregular. The external hemorrhage was very slight. The man soon rallied and next morning seemed nearly well. He continued in fair condition till evening when he grew rapidly worse and died in about twenty-six hours after the injury.

The autopsy showed that the bullet passed through the apex of the heart without penetrating its cavity. The pericardium was distended with blood.

Case 2.—A man was stabbed, the knife entering the right auricle, and death ensued in about five minutes. The pericardium was filled with softly-clotted blood.

The experiments of Dr. Wyman and the autopsies of cases reported, would suggest the possibility of benefit, in some cases at least, from enlarging the opening to relieve pressure on the heart.

Dr. Dakin reported a case in which a woman was shot through the left ventricle. Death was immediate.

Dr. Yemans reported a case in which a man attempted suicide by stabbing, inflicting four or five wounds in the chest. He rallied soon, but in about twenty-four hours, though under, as was supposed, careful care, found means of throwing himself from a balcony 70 feet high, thus causing death. The necropsy showed an incision five-eighths of an inch in extent through the left ventricle. The man might have recovered.

In another case a patient whose heart was believed to be wounded, rallied very soon and was taken home. There was very little external hemorrhage till he got home, when it became very profuse and sudden death ensued. An autopsy could not be obtained.

Dr. Rouse cited a case in which a man was shot in five places, one of the bullets passing through the heart. He lived three hours. Each of two of the other shots was sufficient to cause death.

Dr. Wm. Brodie stated that during his extensive practice with injuries of almost every kind he had not met one of wound of the heart. He regarded Dr. Wyman's paper as one of very great value, especially to the younger members of the profession.

MEDICINE IN ALASKA.

BY ZINA PITCHER, M. D., ACTING-ASSISTANT SURGEON, U. S. M. H. S., SITKA, ALASKA.

During the past year I have been called upon quite frequently by medical gentlemen, who, as tourists, visited this country, to give any information upon the subject of medicine and surgery among the natives, that I might have acquired during my residence among them. The avidity with which such disclosures as I could make were received, leads me to suppose that an article upon the subject may contain something of interest, and, perchance, of practical value, to the profession at large. I have been amazed, time and again, at the soundness of the natives' reasoning and their ingenuity displayed in the treatment of the unfortunate, these qualities being especially noticeable in "surgery."

Before entering in detail into the subject, it might be well to mention briefly the characteristics of this nation of "Thlinkets." From whence they sprung scientists are undecided, accusing in turn the ancient Aztec, the Jews, the inhabitants of northern Asia, and our own North American Indians. Were I asked from which people I deemed them most likely to have originated, I should answer, perhaps two, perhaps all of them. An examination of their features reveals points characteristic of three of them, the Aztec, Asiatic, and North American. Those inhabiting the more northernly part of the territory, the Aleuts, resemble the Asiatic; those of the middle and southern portion all three, all possessing a trait peculiar to the Hebrew—shrewdness in trading. In stature, they are short and "stocky," their breadth of shoulder and depth of chest being remarkable. They walk with anything but a graceful movement—the result of a cramped position assumed while canoeing. The muscles of the chest, arms and back are magnificently developed. Their ability to stand hardships and fatigue is wonderful. They subsist principally upon venison, fish, duck, geese, muscles, oils, berries, and dried sea-weeds. With them it is a case of survival of the fittest, as from early infancy they are subject to an amount of exposure, that would speedily end the life of an ordinary mortal. Content to lie in loosely constructed houses, to wear clothing in many instances composed of cotton alone, with the addition of a blanket in winter, it is indeed wonderful that the ravages of disease, and particularly of their natural enemy, consumption, are not greater. In the treatment of this latter disease they confine themselves to the application of hot sea-water and the enveloping of the chest in some warm material. It is claimed that some of the Indians, for a consideration of four blankets (sixteen dollars), are able to furnish the sufferer with a powdered root, which, when eaten, will speedily check hæmorrhage when an attendant symptom. Judging from the continuance of the symptom in those able to afford the remedy, I am of the opinion that the plant grows most abundantly in the fertile soil of the Siwash imagination. I was not a little annoyed, at first, to see them sitting about in the streets and elsewhere, accompanied by the inevitable tin can, when suffering with a bronchial affection, into which they expectorated their sputa, at times perceptibly tinged with blood. This symptom I found later to be almost invariably present in all severe cases of lung affection, and occurring equally often with the whites as with the natives. The calmness with which the natives regard this usually alarming symptom, accounts, in a measure, perhaps, for the unusual length of life under such circumstances. It is attended by no such shocks to the nervous system as is generally the case with their white brethren. I have seen men expectorate saliva and sputa tinged with blood upon the breaking-up of a bronchitis, and one week later undergo violent exercise in a canoe race, and apparently suffer no inconvenience. Sailors navigating these waters and those of Behring Sea, complain of this symptom, stating that beyond a shortening of the breath upon its disappearance they experience no inconvenience.

Syphilis, scrofula, rheumatism, bronchitis, Bright's disease, tonsilitis, cystitis, gonorrhœa, and metastatic inflammation in general, appear frequently, while the array of ophthalmic trouble, is such as constitutes this a paradise for the recent graduate who longs for fame and experience in that specialty.

In the treatment of ophthalmic troubles the natives confine themselves to cold applications. In cystitis the treatment is the application of hot water, generally taking a primitive Sitz bath. In the treatment of syphilis and scrofula they use a plant known as "the Devil's walking-stick," which grows here abundantly, attaining a height of five or six feet, the stalk being armed with small thorns or prickles, which are detachable. It is prepared by peeling the skin from the stalk, the remainder being eaten *ad libitum*. This is followed in some hours by a deep draught of sea-water, which acts as a prompt and efficient cathartic. This done, I am informed, "the skin becomes clean." I cannot vouch for its efficacy, as the opportunity of testing its value has never presented itself. As a remedy in rheumatism, they apply a poultice of skunk-cabbage leaves. If this proves insufficient they visit one of the numerous hot springs that abound here. These also afford the syphilitic much benefit. As a laxative wild celery is used, prepared by removing the outer skin, the remainder being eaten, care being exercised to keep it from the lips, as it is a powerful irritant. As an anthelmintic, a

plant or root that grows above timber line has a great reputation. I have procured samples of it and will send it away for analysis.

While the Alaskans are not as successful as they might be in medicine, in surgery, in a primitive way, they do excellent work. As a matter of course they understand the use of splints, using bark in manufacturing them. Wherever the integument is broken, whether accompanying a fracture or not, they apply a piece of bark with an opening cut in it to prevent pressure upon the lacerated part, and to allow of the escape of pus, in case any forms. Should pus be discharged a dressing of alder scrapings, from that portion between the bark and trunk of the tree, is applied, the same being as fine as lint. This is changed frequently. In case the wound has an unhealthy appearance, it is anointed with seal oil, which I think is of benefit by acting not only as a lubricant, but locally as a food. If the aperture be deemed insufficient, an incision is immediately made with a knife, which they firmly believe in using freely. In case the opening exhibits a disposition to close prematurely, a wild celery tent is introduced, which, by virtue of its irritant properties, acts not alone as a mechanical interference to its closure, but as a stimulant. As a bandage they admire a six-tailed concern, tying the opposite ends together and inserting between the knots and the integument a piece of bark.

Syphilis and scrofula exist to such an extent that necrosed bones are too frequently met with. As soon as a sinus has formed over dead bone, they make an incision. Should an ulcer appear, seal oil is applied in some instances; in others a powder composed of the dried slime of snails and similar small creatures. It acts as an absorbent and it is quite effective. In gun-shot wounds, the passage is freely washed, and when practicable a rag drawn through it. When the wound is superficial and the openings of entrance and exit close together, an open wound is made of it by dividing the tissue above the track of the ball.

I had an opportunity not long since, of observing their manner of checking hemorrhage. A "Siwash" whose penis, by reason of a tremendous growth of venereal warts, had assumed such proportions as to make it an object no longer to be admired, proceeded to test the old adage, "There's a Divinity that shapes our ends, rough hew them as we may," by cutting away a portion of them with a fish-knife. The hemorrhage becoming quite excessive, I was sent for. Upon reaching the place, the man was found seated in a tub of water, so hot that it fairly scalded him. An examination showed the hemorrhage to have ceased. I enquired as to who suggested the remedy and was told "Injun know long time." They thoroughly appreciate the value of hot water as a hæmostatic.

The women in addition to the troubles already mentioned, unlike their more civilized sisters have but few complaints. Menorrhagia I have met with once; neuralgic dysmenorrhœa twice. Their manner of giving birth is worthy of mention. A shallow box, three feet in length, is prepared. After being well padded, two bars are placed across the top about sixteen inches apart. In case the family are too poor to afford this luxury, a shallow hole is dug in the ground, in some secluded spot, and grass is used as padding. The bars are placed as in the box. The woman takes her place in a squatting position upon one of the bars, grasping the other with her hands, the child passing between the bars into the box. They claim for this position comfort and an ability to greatly assist themselves during a pain. Their manner of treating the placenta and cord is as yet unknown to me. My limited stock of "Chinook jargon" will not permit of so extended a conversation. I should imagine from what I have ascertained that they consider the excavation a means of facilitating traction upon the cord. One thing is certain, the cord is not immediately cut. If any case of post-partum, or puerperal secondary hemorrhage has occurred, it has been either successfully combated or hidden; as I have never heard of a single instance. A few days' rest seems to put the woman on her feet in good condition. Previous to a confinement, or during the menstrual period, the women blacken their faces. During the latter term and upon arriving at the age of puberty they are considered unclean. In some tribes upon the approach of the first menstrual epoch, the girl is isolated, remaining in seclusion until the completion of the term, when she takes her place once more among her people, the occasion being marked by a grand "Pottack" (feast).

The diseases affecting the eye may be enumerated as follows, their frequency being in the order mentioned: Iritis, syphilitic and rheumatic; ophthalmia, gonorrhœal and catarrhal; granular lids, conjunctivitis and cataract. The increase of blindness due to cataract is simply apalling. Much might be done for them were it not for a syphilitic taint, which so seriously retards the healing process in other surgical proceedings that no one has deemed it advisable to risk an operation. Again, many of the Indians in case of a fatal result believe in compensation in kind, or its equivalent—"a life for a life," or one hundred blankets (four hundred dollars). The chances of recovery even under what may seem favorable circumstances to the uninitiated, are many times slight. For while they will call in a physician, they cling with a bull-dog tenacity to their ancient superstitions and will accept the opinion of the Indian medi-

cine man's "fake" (or spirit) in preference to the opinion of his more enlightened contemporary. Should this fake, through his earthly medium, give an unfavorable prognosis, you may count on finding at your next visit an invalid rapidly approaching the happy hunting grounds; for it is a custom under such circumstances, whether from a mistaken idea of humanity or a greed of gain I cannot say, (although I incline to the latter opinion) to administer a decoction, the nature of which no one as yet has been able to ascertain, to help them along. The body of the doomed person is dressed in its funeral raiments before death. They dispose of the dead by cremation. The ceremony is decidedly interesting, giving evidences of a rich underlying vein of savage superstition. Nevertheless, it is an exceedingly solemn affair; devoid of all those wild doings that the civilized mind naturally associates with such a ceremonial. I was sufficiently impressed so that upon leaving the grounds I found myself replacing my hat, having unconsciously removed the same at some time during the ceremony. A clean dress, beaded blanket, moccasins, and a pair of white gloves, over which are drawn a pair of mits, comprises the the cremation costume. The blanket is often removed before lighting the fire; the gloves and moccasins never, because the Indian believes the body makes a long journey over rugged mountains grown up with tangled underbrush, which tears and lacerates the hands and feet unless so covered. These mountains crossed, a level plain is reached which leads up to the bank of a stream, so wide that the departed upon the opposite side resemble small insects. Wearied with the journey and watching these spirits afar, the traveller falls into a profound slumber, during which he is ferried across to a land with fish and venison blessed.

In conclusion I will give the formula for a favorite prescription in syphilitic affections, it being the creation of some medicine man's mind, "years ago." Before the advent of the white man it was extensively used, I am told, but since that time the remarkable increase of the trouble has rendered it a dangerous remedy, because of its double effect, viz: that of cleansing the system of the unfortunate one and driving mad the person that conveyed the disease, and compelling him or her to follow in all journeys the victim. A general use of this mythical remedy at the present day would necessitate the erection of an insane asylum in every settlement The following is the method of preparation, as given to me by a number of intelligent Indians: Go to the forest in the morning when the shadows of the trees are long; gather from each tree and all growing things that are beautiful, a leaf. Return, and as the tide recedes, follow it till its lowest mark is reached; obtain a few grains of sand and a few drops of sea-water. Catch during a storm, in the hand, a few drops of rain. Take of the ashes of a wood fire and the tears of a child, a little, and so on, mentioning a multitude of like ingredients. These mixed, constitute a dose. This formula and the method of treatment indicated shows a remarkable blending of the superstitious and the rational. Much more could be said of this strange people, but as it does not concern directly or indirectly the topic of medicine I will let this suffice.

TONIC TREATMENT OF GOITRE.

BY L. H. BUXTON, M. D., FULTON, IOWA.

In the MEDICAL AGE of Oct. 11th, was an article by DR. ELY, of Medina, Mich., in which he lauds the use of phytolacca decandra in the treatment of bronchocele, even going so far as to consider it a specific, so-called.

Now I think a careful examination of this article, together with the etiology and clinical history of the case, will show conclusively that it was not the use of phytolacca decandra which has given DR. ELY and his father such success in the treatment of the disease, but the long-continued tonic treatment, which he tells us he "never omits to use."

Let us consider the etiology of goitre, that we may better understand its treatment. I think the great body of our medical writers are agreed in regard to its principal causes. DR. ERICHSEN says: "It occurs chiefly amongst the poor who live in cellar kitchens, or damp, ill-ventilated streets and courts. It is rarely, if ever, met with amongst those who lead open-air and active lives."

KEATLY: "The immediate cause is unknown, but certainly poverty, and an unhealthy mode of living, conduce to it."

I find the above sentiment voiced by a large part of the profession. The nervous system being the first to suffer from these unhygienic conditions, the central portion becomes impaired, and hence follows cardiac symptoms and anæmia; in fact, the symptoms of goitre can all be thus accounted for—not excluding the many menstrual disorders which often occur.

I have noticed in nearly all my cases an hereditary neuropathic tendency, one of the most prominent symptoms being anæmia, although it is not always an early symptom, but rather co-existing with goitre.

After looking at the etiology of this disease, could we find a more rational mode of treatment than that laid out by DR. ELY? Excluding his phytolacca decandra (with which I have had no experience). He says: "It is *very important*, I think, to *always* use a tonic when giving an alterative, and I never omit it."

Allow me to say here, that under the banner

of alteratives have been marshalled all the unmaterialized ghosts of materia medica which have been haunting the busy practitioner for years, but as an age has come in the which ghosts and hobgoblins have passed away, with them must go many of the so-called alteratives, and with them I hope the name itself may pass away.

But to return to ex-ophthalmic goitre. It appears that the doctor gives one of the best forms of iron possible for this class of patients —ferri dialyzatum—and he combines this with his alterative at times. But he *always* uses the iron, also an external irritant, in the form of tr. phytolac. decand., which I consider of value only for its irritating properties: in fact, in that regard, much inferior to iodine.

LOOMIS says: "The first remedies proposed in this affection were quinine and iron, and their use is still followed by the best results."

Nearly all our most prominent medical writers agree as to the utility of iron in the treatment of this affection, TROUSSEAU excepted—he considers it valueless. Therefore, iron may be considered of prime importance, and in cases where the nervous symptoms are prominent, I would use cod-liver oil also, with the iron. But first and last iron is the remedy and that may be required for a long time. Here I fear is where many of us fail because we do not continue the treatment long enough. The doctor telling us that in difficult cases he continues treatment for a year or more, and in the case cited he says, "the only change noticed in the first two months was that the glands had softened slightly." Too many stop right here and conclude that as there is so slight improvement in two months they will try some other method of treatment, or, having given their patient too favorable a prognosis at first, he goes elsewhere for treatment.

More important than any medical treatment is proper mental and physiological hygienic conditions, pure air and good food being Nature's great remedies.

Now I am confident that if DR. ELY will depend simply upon his tonic treatment in his thorough way, success will crown his efforts in the future as in the past, and he will be saved the trouble of making and dispensing his tincture of phytolacca decandra.

In conclusion let me say that what I consider true in regard to the above drug is true of many more. We often unite some thorough hygienic and tonic treatment with some drug, and as success crowns our efforts we give all credit to the particular remedy when in fact Dame Nature and our old tonic treatment have performed the work.

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Editorial.

MEDICAL SOCIETY MEETINGS.

With the advent of the long nights and the concomitant cooler weather, we witness throughout the land a reawakening of dormant faculties of the professional mind, and the season of medical society meetings is at hand. With the advent of this season comes, moreover, the periodical cry: "What shall we do to be saved from those things which make these meetings a weariness to the flesh?"

The degree of activity of the medical society of a place is an unfailing criterion of the status of the resident profession. This is so both because the live practitioner, and, withal, the one who aims higher than the mere accumulation of money, is irresistibly drawn to the society of kindred spirits, and because of the educational influence of the society. The lodestone not only attracts steel, but it imparts to it its own peculiar property. There may be, and, doubtless, are exceptions to the rule, but we seldom meet a practitioner who combines a proper conception of his calling with eminent natural or acquired qualifications for his work, who habitually forsakes the assembling of himself together with his brethren, as the manner of some is. Such a practitioner knows that as iron brightens iron, so does the countenance of a man his friend, and while upheld by the conviction that the narration of his observations and experience helps to qualify others for their work, he knows that he never fails to derive benefit himself from a meeting with his brethren.

But medical societies are not yet what they should be, and until they are, suggestions of improvement will continue to be in order. Several of our exchanges have of late been kindly volunteering such suggestions, some of which are quite practical, while others are not. Some of the latter have evidently been made under an apprehension that doctors are different from other mortals, as regards the peculiarities of a common humanity, while others have failed to take into account the fact that the majority of practitioners are removed from

the centres of population, where it is a comparatively easy matter for doctors to meet frequently and periodically. The circumstances of the country practitioner are so different from those of his city brother as to prevent the formulation of any plan for the conduct of the societies of both. City physicians run across each other daily and have thus afforded them frequent opportunities for the discussion of their cases—opportunities which, we believe, are frequently improved. The physician practicing in the country has no one thus to lean upon, and thus, necessarily, he becomes, in a measure, a law unto himself. But it is not good for a man to be alone, and the necessity of medical societies in country places is intensified.

We have in mind, at this writing, two medical societies with the practical working of which we have had occasion to familiarize ourselves, and without disparagement to the one, the plan of the other harmonizes very closely with that after which we believe medical societies, regardless of locality, could be successfully run. It recognizes the fact that the doctor is a social being, as well as a scientific. Its meetings are not stupidly formal, but are pervaded with a spirit of *bonhomie* which lends to them a charm and attractiveness wanting in societies in which science is apparently held to be incompatible with good fellowship, and from which, consequently, the members separate without having been brought into contact with the better part of each other. Doctors differ and quarrel largely because they don't know each other. We have known two of them, for instance, who deriving their conceptions of each other from something which a patient, whom each had treated, had said, barely condescended to friendly glance at each other as they passed by. This anomalous state of affairs continued for years, until one day the opportunity presented for them to mutually discover that they were both pretty good fellows, and, as a result, they became, and have continued to be to this day, such fast friends that each regards the discovery as more important, indeed, in its practical results to him personally, and, probably, also to his patients, than a discovery of some new form of bacillus. The doctor's life is too short, and its cares too momentous, to justify him in jeopardizing the sympathy, friendship and consequent aid which should come to him from his fellow-workers. The medical society, therefore, which brings its members closest to their inner selves, is of the kind which should be cultivated, even though it do not give itself up to the discussion of the so-called "exact" (which is a synonym for non-practical) things in medicine.

In the society to which we have above referred, as that which meets our conception of what a medical society should be, a member reads a paper on some subject of seasonable interest. It is then before the meeting for discussion, and the interest and profit of the meeting is always enhanced when members take pains to prepare themselves for this discussion by collecting from their experience facts that have a bearing on the subject. This discussion being closed, members are encouraged to talk about such cases of interest as may have occurred since the last meeting, and all are supposed to offer suggestions. The meeting then adjourns, but the members are usually intercepted by an invitation to repair to the dining-room of the member at whose residence the meeting has been held. Here an hour is spent in gratifying the inner man, and in the conversation, anecdotes and repartee which contain the touch of nature which makes all men kin. The report of the proceedings of meetings such as these may not make a very valuable contribution to scientific literature, but the proceedings themselves leave an effect away, deep down in the being of the members which cannot be guaged by the ordinary rules for scientific calculation. We have a decided preference for such societies, and would urge their organization in every locality where they do not exist.

QUININE IN TYPHOID FEVER.

We had supposed that the place of quinine in the treatment of typhoid faver, had become pretty well fixed in the minds of educated physicians, and that the belief that the drug is capable, under any circumstances, of aborting an attack of the disease, had long since been exploded. A paper recently read before the Practitioners' Society of New York, and the discussion thereon, makes it appear that the beliefs on these points which obtained a quarter of a century or more ago, have not yet been entirely dissipated. Dr. Clement Cleveland, who is a Master of Arts, and whose paper bears inherent evidence of its writer's intelligence, committed himself squarely to the belief that quinine, given in large doses (60 to 90 grains in 24 hours), is capable of aborting typhoid fever and that when it does not abort it, it favorably influences its course. He holds that this belief is not unreasonable, since "the parasite theory of typhoid is generally admitted; the typhoid bacillus has been found in the blood and urine of typhoid patients." He does not stop to inquire why the drug does not abort small-pox, scarlet fever, cholera and many other diseases in which a bacillus may be found as a probable materies morbi. He, moreover, makes a well-nigh fatal admission when he says "it is important to begin with quinine early and not to wait to be absolutely sure of diagnosis. My own plan is to begin with a large test-dose, of five or ten grains every 15 minutes for two hours, as

the nature of the case presents itself to my mind. This dose is given in the latter part of the afternoon. The temperature is taken every two hours. If by morning there has been a decided lowering of the temperature I feel encouraged to believe that it is a case manageable by quinine, and particularly so if it is accompanied by profuse sweating. * * * * If by 72 hours it has not reduced the temperature, I believe it never will." The experienced practitioner will reach a quite different conclusion from that here intended. He will argue that if the temperature has been permanently reduced the case was one of malarial fever, and if not that it was one of genuine typhoid. Manifestly, it is only a case of undisputed typhoid which can furnish a test of the efficacy of quinine in its abortion. To give it in a case whose nature has not been properly established, can prove nothing. The fallacy of the writer's argument is very apparent.

We believe there is little doubt in the minds of such of the profession as have had any considerable experience, that quinine is harmful rather than beneficial in typhoid fever. The only good effect of which it is capable is noticeable after the German use of large doses to lower the temperature, and even this use of it is rapidly losing friends in this country. The use of small doses for its "tonic" action is well-nigh poisonous. Had DR. CLEVELAND'S paper been read before a less distinguished audience it would, probably, have been received with less favor, and would, therefore, have been less pernicious in its results, for it is now barely possible that it may delude some reverencer of distinguished names to give the treatment advocated a trial.

DEATH OF DR. A. F. HOKE.

DR. A. F. HOKE, one of the class of younger physicians of this city, died of typhoid fever last month. He had been singularly fortunate in securing a clientele, and although but 35 years of age and having been in practice but 10 years, his time was almost entirely taken up with professional demands. This success was due to ability supplemented by a courteous demeanor and strict attention to his patients. DR. HOKE'S personal relations to his brother practitioners were of such a cordial nature that the news of his death created an unusually wide-spread feeling of sadness, which has found partial expression in the following resolutions adopted, respectively, by the Detroit Medical and Library Association and the Alumni Association of the Detroit College of Medicine:

Whereas: One of our number, whom we all have loved and esteemed, has been called away from our midst;

Resolved: That in the death of our fellow member, DR. HOKE, this Association experiences a sense of deep bereavement, and the members a personal loss.

We have learned to know him well, and in all our relations with him, both as a member of the Association and as a brother physician, his nobility of character, his purity of life, his devotion to his calling, and his professional ability have been continually manifest.

While he has won the esteem of the order, he has won the gratitude of the young men and the affection of all.

To measure the value of life not by length of years, but, rather, by excellent deeds, his has been a full and rich life, and we bow to the higher wisdom of God which has taken him thus early.

We would join with his many bereaved patients in tendering to his wife and relations our heartfelt sympathy.

J. H. CARSTENS,
DAVID INGLIS,
F. D. SUMMERS,
} Committee.

Whereas: By an inscrutable law of nature, DR. AMOS F. HOKE has been removed from our midst, therefore be it

Resolved: That, by his death the Alumni Association of the Detroit College of Medicine has sustained an irreparable loss, society has been robbed of a most excellent physician, and the family of the deceased has lost a noble husband and son. Be it further

Resolved: That this Association extends its sincere condolence to the family of the deceased, and that a copy of these resolutions be furnished to the same, and likewise to the medical and secular press.

JOHN SNYDER,
President.

N. WIEST,
Secretary.

THE KOLA NUT.

M. DUJARDIN-BEAUMETZ has a communication on this subject in the Bulletin et Mémoires de la Société de Therapeutique. He had received branches of the trees bearing the nuts from M. GUILLET, who was given them by an explorer of Central Africa, A. COFFINÉRES, of Nordeck. They show the details of the tree—its appearance and the appearance of the nut.

He read to the Society a thesis by his pupil, M. MONNET, Clinical Chief of the Faculty of Medicine, of Lille, in which M. MONNET has especially studied the physiological action of kola. His article contained a very large number of tracings taken from animals, showing the cardiac tonic action of the kola. M. MONNET considers kola one of the best heart tonics. Contrary to the opinion of M. BEAUMETZ, M. MONNET maintains that kola acts powerfully as a diuretic. He insists also upon its action on the digestive tract, stimulating digestion and if given in excess creating diarrhœa.

CAMPARDON has studied the preparations of kola and has assured himself that they really possess tonic properties. He has, however, not been able to prove their diuretic action.

DELPETCH is of the opinion that kola nut is analogous to coffee, for it contains a large proportion of caffeine.

DUJARDIN-BEAUMETZ thinks the latter suggestion demands investigation, for the same chemical composition does not always imply the same therapeutic properties for medicines. Thus cocaine and caffeine, identical from a chemical standpoint, differ greatly in their therapeutic action.

C. PAUL: The caffeine of commerce is extracted from tea, and is in reality theine. Though caffeine, theine and theo-bromine could easily be confounded with regard to their effects, this fact must, nevertheless, be borne in mind.

WURTZ: Chemically this confusion cannot be made, at least after the recent German reports; all these alkaloids show different formulæ.

Notes.

A correspondent has sent us a copy of a price-list issued by the Oldberg-Wall Laboratory, the frontispiece of which furnishes an illustration of one of the curiosities of modern advertising. The initials of the name of the concern being O. W. L., a brilliant idea flashes athwart the mind of the artist, and he has given us a moon-lit scene in which, holding vigil on the boughs of an ancient tree, are a male and a female owl. Immediately beneath the female is a nest in which lies sprawling a feathered something which we suppose is intended for a very young owl. The bespectacled male sits opposite, with a pair of obstetric forceps under one wing, and a bottle labled "fluid extract ergot, O. W. L.," under the other. The viviparous female bird has evidently just been delivered by the male, who, after vainly endeavoring to relieve the dystocia by means of the forceps, has given the O. W. L. ergot with success. *Ergo:* O. W. L. ergot is (page 13 of the list) "more promptly and energetically active and uniform in quality, than any other ergot in the market." This kind of advertising may take with a certain class of owlish practitioners, but it will scarcely draw patronage enough from the profession at large, to reward the great genius which gave it birth. The profession has not yet been educated up to a paying appreciation of this sort of thing.

The contagiousness of consumption is evidenced by facts that are apparent to all who are on the look-out for them. A recent item in a French medical journal tells of the death by consumption, of chickens that had swallowed the sputa of consumptives, and also of the death, by consumption, of recently healthy persons, who had feasted upon chickens that had eaten the sputa of consumptives. Even kittens that have licked up the consumptive's sputa have been seen to grow thin, and, wasting away, soon die like the true consumptive. Let any of our readers who doubt this, try it upon the kittens whenever a consumptive patient is being treated by them. Let them watch the cases carefully, and report results. The knowledge thus acquired may prove valuable beyond estimate, to those who have the care of consumptive patients.

Anacardium, when administered to a healthy person, creates, according to the Hahnemannian Monthly, a propensity to swear. The value of the drug as a moral force is thus clearly indicated, and the writer referred to had occasion to test it in a minister who had developed a strong *penchant* for profanity. The result is said to have been a cure. The next drug which our homœopathic friend should discover is one whose physiological action is to convert a sensible man into an ass. The therapeutic effect of such a drug on the editor of the Hahnemannian, would be awaited with interest. One ROUNDS, president of the American Institute of Homœopathy, who stated, in his annual address, at Saratoga, a short time ago, that "the great Over-Ruler will see to it, as he has in the past, that it (pure homœopathy) is not blotted out," would also be a good subject to try it on.

It is refreshing to see statements like the following from orthodox pulpits. The clergyman in the present instance was the reverend DR. HUNTINGTON, rector of Grace Church, New York: "The Bible nowhere makes total abstinence necessary to righteousness, and it ill becomes advocates of total abstinence to maintain that any one cannot be really good unless he is a total abstainer. * * * The remedy for the widespread evil of drunkenness can best be secured by the quiet method of personal example and influence, rather than by noisy and demonstrative parade. I am not one of those who expect that legislation is going to effect a remedy of the evil. We must look to the personal example of abstinence set by men for the benefit of their weaker brethren, to gradually reduce the pitiable evils of intemperance."

Harvard has just turned two hundred and fifty years of age, and the event has been appropriately celebrated with a jubilee, part of the celebration being the conferring of the honorary degree of LL.D., on persons deemed sufficiently distinguished to receive them. Out of the medical profession there were three recipi ents, JOSEPH LEIDY and S. WEIR MITCHELL, of Philadelphia, and JOHN S. BILLINGS, of Washington. It is not at all strange that Boston could find no one in New York sufficiently distinguished to be the recipient of her favors, but the average New Yorker will extract some consolation from the admission by the Boston Medical and Surgical Journal that the medical department of Harvard is not what it should be.

The St. Louis Medical and Surgical Journa declares that at the May meeting of the American Medical Association in St. Louis, a number of editors of medical journals formed themselves into a mutual admiration society, and adopted as a motto the legend "You scratch my back and I'll scratch yours." It further alleges that

the members of this society pledged themselves to one another to copy as much as possible from each other. This is all news to us. A careful scrutiny of our exchanges, however, convinces us that the St. Louis Medical and Surgical Journal does not belong to this society.

St. Louis has finally reached that stage of progress in modern civilization which permits the membership of females in its local medical societies. MARY H. MCLEAN, "the first woman ever elected to membership in the St. Louis Medical Society," was admitted on October 16, ult., and the event is heralded as "making an epoch" in the history of that organization. It is rather amusing to us here in Detroit, where no special claims to chivalry are made, and where women were admitted to medical societies ten years ago, to read of the excitement which this proper recognition of woman is creating "down south."

A partial diversion from editorial work during the past month allowed an accumulation of exchanges on our table. A hurried look through them since again donning the full harness, has revealed some choice bits which were thus permitted to become stale. Among these are several scintillations at our expense, from the Weekly Medical Review. As the late lamented A. WARD would have said, the Review is an "amoosin' cuss," and we are exceedingly sorry that the lapse of time forbids a more specific acknowledgment of its peculiar compliments. We trust our Love-ly brother has not attributed our silence to indifference.

The St. Louis Medical and Surgical Journal copies the following from a French paper: "And so poor JONES is dead," says BROWN as he meets ROBINSON on the street. "Alas, too true! The strangest thing I ever heard of. Marvelous! Astonishing!" answers ROBINSON. "What is? that he should have died?" "No: his disease. You remember how fearfully bald he was? His head was dead slick—and yet—they say he died of *capillary* bronchitis. It beats me!"

MARK TWAIN once stopped at the house of a friend who had seven children, one of whom, a boy, was at the time suffering from a scurf on his head. The boy's mother was telling TWAIN about it, and asking him what she had better do. TWAIN inquired very carefully about when the scurf first appeared, what the symptoms were, and what remedies had been employed. Then, after thinking a moment, he ran his fingers through his hair, and said: "Try sand-paper."

"When consciousness becomes modified, in any degree whatever, through the influence of alcohol and when, or as long as no exercise of independent nervous force is adequate to restore it to a normal state," then, according to a DR. T. E. WRIGHT, the individual thus affected is drunk. Wonder how much spiritus frument. DR. WRIGHT imbibed before he wrote this remarkable sentence.

The death of PAUL BERT, the distinguished French physiologist and politician, is announced. He will be remembered principally for his researches into the precise methods of inducing anæsthesia. He had reached his 54th year. Like VIRCHOW and PLAYFAIR and ERICHSON and others, BERT did not find his practical interest in his country's welfare incompatible with his scientific researches.

Book Notices.

A TREATISE ON THE PRACTICE OF MEDICINE. By Roberts Bartholow, M. D., LL. D., etc. Sixth edition.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

The well-known reputation of the author of this work, as an investigator and progressive student, is amply endorsed by the originality and usefulness displayed on almost every page of his writings.

Ever since some one had the temerity to ask the American Medical Association, in 1884, that it censure ROBERTS BARTHOLOW for his studies on an injury of the brain of a patient in one of the Cincinnatti hospitals, the reading and thinking members of the profession have looked with interest for anything he might produce.

In the last edition of his treatise on the Practice of Medicine, the leading features of his work—system and accuracy—are used to give a very practical turn to all that he has to say about the causes, symptoms, and treatment of disease. We are, however, surprised that he tries to draw a sharp line between the surgical and medical treatment of his patients. In his chapter on Cerebral Abscesses he wastes time in talking about the diapedesis of the blood-corpuscles with the hope of preventing abscess, and then says that the evacuation of such abscess is a rare question of surgical expediency with which he has nothing to do. When he speaks of abscess of the liver he lays great stress upon the use of large doses of quinine to prevent the migration of the white blood-corpuscles, but does not hesitate to speak flatteringly of the exploratory puncture as a means of treatment when the abscess cannot be located with precision. To some, use of the needle in the liver tissue appears to do good. He disposes of the pet theory of the day—bacilli of phthisis and cholera—in a few words, but they are full of meaning and to the point, so far as any practical deductions are concerned.

There are no grounds for comparing the work of BARTHOLOW with that of FLINT, they are so unlike. Yet each is an authority and fills a long-felt want. The publisher's work is first-class.

Therapeutic Brevities.

HOW TO ADMINISTER SALICYLIC ACID.—DR. LATHAM (Croonian Lectures) says: 1. That salicylic acid obtained from the vegetable kingdom must be alone employed. 2. Give the acid without an alkali or base. A good way is to mix 100 grains with 15 of powdered acacia and a little mucilage. After the mass hardens divide it into 30 pills. 3. Place the patient fully under the influence of the drug, viz: let him have sufficient to produce cerebral disturbance, slight deafness, buzzing in the ears, or headache. As these symptoms develop the temperature and pain disappear. To an adult he gives three doses of 20 grains every hour, and if the head be unaffected a fourth dose at the end of another hour, and then repeats the dose every four hours till the physiological effect shows itself. From 80 to 150 grains will be required. 4. Give the patient from 40 to 80 grains daily for ten days after all pain and pyrexia have passed away. 5. Let the patient's diet consist entirely of milk and farinaceous food for at least a week after the evening temperature has been normal. On the other hand let the patient have meat and you may look forward with fair probabilities to a relapse. 6. Take care to maintain a daily and complete action of the bowels. Calomel is the best purgative—from two to five grains at night, followed in the morning, if necessary, by a saline draught This is a most important adjuvant to the action of salicylic acid. 7. Let the patient be enveloped in a light blanket and with no more bed-clothes than necessary to keep him from feeling cold.—*Epitome*, Oct., 1886.

APON.—This is the name given by POULET (Bull. de Therapeutique) to a preparation which, applied locally, he claims possesses anæsthetic properties:

℞ Tr. capsici, 200 parts.
Ammon. liquidi, 100 parts.
Essentiæ thymi.
Hydrati chloralis, ää 10 parts.
Alcoholis (60 per cent.) 1,000 parts.

The pepper is digested with the alcohol and ammonia a month, then the essence and chloral are added to the expressed liquid. The preparation is preserved in a hermetically-closed bottle. It is useful in hysterical pains, muscular rheumatism, enteritis, piles, etc. It is applied, either pure or mixed with oil, by means of a rag. It may also be given internally, in doses of 10 to 20 drops, in a little water.

SOLIDIFIED LINIMENTS.—Any one who has had to apply a liquid liniment to the chest, or any other part of the body in an upright position, will have experienced the difficulty in keeping the liniment in the palm of the hand until it is fairly brought in contact with the affected part. It is a matter of surprise that in the last edition of the Pharmacopœia liniments are retained in their liquid form. There is no difficulty in solidifying most liniments by the addition of some gelatinizing material, so as to enable them to be smeared over the affected part with some approach to definiteness of quantity and to the great convenience of the patient. Solidified liniments are not only more convenient of application, but are far more easy of transport.—*Lancet.*

ACUTE RHINITIS.—For acute rhinitis in its incipient stage, of all the remedies tried by DR. SAJOUS, the following has given the best results. In the doctor's words, "it acts like magic."

℞ Morphinæ acetat., gr. iv.
Bismuthi subnit.
Pulv. talc, ää 3 j.
Fiant chartulas, xxx.
M. S. Use as a snuff.

DR. SAJOUS states that this will check a very bad cold, or coryza, sometimes with only one sniff of the powder.—*Coll. and Clin. Reporter.*

PERMANGANATE OF POTASH IN BURNS AND FROSTBITE is employed by ZUEBOFF (Meditz Obozrenie, London Medical Record) for the following reasons:

1, Permanganate of potash, applied on compresses in a solution of one or two grains to one ounce of water, is an effective remedy for frostbite of the first and second degrees, and burns of the first degree.

2. In burns of the second degree, a lotion of one-half grain to the ounce relieves inflammation and pain, and limits suppuration.

PILLS FOR PHTHISIS.—POTAIN recommends the following:

℞ Creosote, ♏ ½.
Iodoform, gr. $\frac{1}{10}$.
Ext. of opium, gr. ¼.
Balsam of tolu,
Turpentine, of each, ♏ ⅓.
M.

Of these from 3 to 10 may be taken daily.

COCAINE IN THE HYPODERMIC TREATMENT OF SYPHILIS.—MADELBAUM (Monatsch. f. prakt. Dermatol.; Ctrldt. f. Chir.) recommends the addition of cocaine to the mercurial solution, and states that it renders the injections nearly or quite painless. The following solution is for one injection:

Cocaine hydrochloride, 3–4 grain;
Mercury dicyanide, 15–100 grain;
Distilled water, 15 drops.

—*N. Y. Med. Jour.*, Nov., 1886.

SALICYLATE GELATIN FOR ECZEMA.—The Journal de Méd. de Paris gives the following for eczema:

℞ Acid salicylate, 10;
Gelatin, 30;
Glycerin, 10;
Water, 30.

Dissolve by heat.

COCAINE HYPODERMICALLY FOR ASTHMA.—PROFESSOR MOSLER, following the example of DR. ROSCHORNER, of Dresden, has been using the injections of the five-per-cent. solution of salicylate of cocaine for asthma, with the best results, even in cases where other remedies have failed to give relief.—*Revista Balear.*

COCAINE IN WHOOPING-COUGH.—DR. LABRIE recommends the following solution to be painted on the tonsils, isthmus of mouth, back of tongue, and, if possible, on the larynx:

℞ Aquæ destill., 10 grms.
Cocaini hydrochlor., 50 centigr.

Medical Progress.

WHITLOW—ITS VARIETIES AND TREATMENT. —*Mr. President and Gentlemen:* The subject, whitlow, on which I have selected to read a paper to-night, is one on which too little attention is bestowed, and it is a disease that by prompt measures many a finger may be saved from that distorted condition commonly seen, viz: either stiff and unsightly, or in a state minus the flexor tendons, consequently useless and sometimes even in the way.

As anatomy is the foundation of all surgery, with your permission I intend to open my paper with a short *résumé* of the anatomy of the finger, in order that I may be able more forcibly to show the necessity of the different modes of treatment and what results may occur if some of such methods are not brought with promptitude to bear on the various forms of whitlow. The skin on the palmar surface of the finger is intimately attached to the cellular tissue beneath; this is especially well-marked at the tip of the last phalanges, where these tissues can with difficulty be separated from each other. On the back of the fingers the skin is thinner, and the subcutaneous tissue looser and smaller in quantity than on the palmar surface. The blood-vessels, lymphatics, and nerves pass through the palm of the hand and divide into two digital branches which run in the cellular tissue along either side of the fingers, and what I want most particularly to point out is that they are placed (if the finger be represented as a four-sided body) near what would correspond to the angles of the square, and not at the sides. Now this is a very important point, as will be presently shown. These blood-vessels, lymphatics, and nerves on the palmar surface pass up to about the middle of the last phalanx, where they form an arch from which branches are given off to supply the skin, cellular tissue, and matrix of the nail. From the arteries offsets are furnished to the fingers, sheaths of the tendons, and their contents, the joints being supplied by small twigs from arterial arches resting on the bone. The nerves run up the fingers, and as it may be described, the two on the palmar surface along the right and left anterior angles of the square, the dorsal nerves along the right and left posterior angles of the square. The tendons are enclosed in fibrous sheaths. These sheaths extend from opposite the metacarpo-phalangeal joints to the proximal ends of the third phalanges, where, in fact, the flexor profundus tendons are inserted; opposite the finger joints the sheath is lax and thin, and it is through this less protected part that suppuration or rather inflammation from without finds its way into the interior of the sheaths. These sheaths firmly surround the tendons and keep them in their place, being attached and blended with the periosteum of the phalanx beneath. They are lined throughout with a synovial membrane, which stops in the second, third, and fourth fingers at the base of the fingers, but in the thumb and fifth is continuous with the synovial sheath of the flexor tendons, which extends above the annular ligaments. With regard to the tendons, it is needless to waste time in describing their anatomy. The only really important points are, that they receive their blood supply from small arteries that pierce the fibrous sheaths in which they run, and that the flexor profundus tendons are inserted into the epiphyses of the last phalanges. The last phalanx has no real periosteum, its deficiency being supplied by the cellular tissue covering it. The second and third phalanges have a periosteum, as in other bones. As to the cause of whitlow, I have looked through all the literature accessible to me on the subject, and have come to the following conclusion, viz: that some are due to local, others to constitutional, causes. Cuts, scratches, punctures, etc., giving rise to the phlyzacious pustule and the cellular whitlow, attacking the terminal phalanx, are seen chiefly in cooks, poultry dealers, and fishmongers, being due to some poisonous material absorbed. The severer forms, that is to say, the tendinous and periosteal whitlow, occur from a slight puncture, wrench, or bruise to the affected part in a patient in a low constitutional condition. Lastly, no doubt any form of whitlow may arise in epidemics, and is specially seen in periods, when boils are prevalent, and, like them,

may depend on certain conditions of the atmosphere, food, and times of the year.

The tendinous whitlow following post-mortem wounds of the skin at the end of the finger is really due to the lymphatics carrying the morbid material into the synovial sheaths, causing them to suppurate, and therefore is a lymphatic inflammation, and not the result of direct injury.

An inflammation of the finger may give rise to great œdema and redness about the skin, more particulaly at the back of the fingers, for it is there the cellular tissue is looser and less firmly bound down. Now it is most important to distinguish the redness and swelling resulting from suppuration about the palmar surface of the finger from a condition not uncommonly seen on the backs of the fingers, and called by Mr. Morrant Baker, Erythema serpens; this follows a slight, probably poisoned, abrasion, and spreads in a circular manner, leaving the injured part well.

For to cut into the palmar surface of a finger which is only attacked by such an erythema is, it is needless to say, very damaging surgery. This condition is worthy of mention, in order that great care may be taken to thoroughly make out the condition of the finger before attempting any line of treatment. Therefore, in every case, examine the palmar furface, and if the patient can bear firm pressure all along the finger, leave it alone; do not be in a hurry to use the knife. All that is wanted, if the case is one of erythema serpens, is that some astringent, as nitrate of silver, should be applied.

I would recommend you to abstain from incising inflamed tissues on the dorsal surface of the finger (provided the swelling and inflammation is not part and parcel of an inflammation of the palmar surface), as you can do but little good, and leave an ugly scar. Poultice and elevate the part, and wait for the matter to point, then open by a small incision. The different kinds of whitlow are as follows:

Phlyzacious pustule, Suppurations beneath the nail. Cellular whitlow. Tendinous whitlow. Periosteal whitlow.

The first, and perhaps the simplest form, is the phlyzacious pustule; this is nothing more than an accumulation of fluid between the epidermis and the true skin. The fluid may be serous, bloody, or, as the name indicates, in a purulent condition. The pustule may extend the entire length of the finger, involving the palmar and dorsal surfaces, or may be simply confined to one part. It forms with a good deal of pain and tenderness of the finger attacked, and sometimes with constitutional symptoms; here care must be taken not to mistake this for the more serious form of inflammation, viz., suppuration in the sheath of the tendons or periostitis of the phalanx.

The treatment of this phlyzacious pustule is simple; all that is required is to puncture the bulla and let out the fluid, or perhaps better lay the pustule open from top to bottom with scissors, and allow the fluid to escape freely. While describing the various inflammations affecting the fingers, it would not be right to pass without mention those little collections of pus which frequently form under the nail as a result of a puncture or the breaking down of blood following a pinch. They give rise to considerable pain of a throbbing character, keeping the patient awake at night, and frequently are ushered in by a slight rigor. Very soon a head of pus can be seen under the nail; this increases the pain, as it is bound down by such a hard and resisting structure as the nail.

With regard to the treatment of these cases, there is a difference of opinion. Some say leave them alone, simply poultice and allow the matter to come to the surface. Now with all due deference, I do not at all agree with this line of practice, for while dissecting and in the wards I was unfortunate, as many of us are, to suffer frequently from these suppurations; and I must say the way to obtain most relief is to take a hare-lip pin or some such narrow-bladed instrument, and gently insert it beneath the nail, keeping it quite close to the nail, so as not to wound, if possible, the tissue beneath, pass it down to the collection of pus, and then press the needle and allow the pus to flow out. This gives instant relief, and prevents the matter from burrowing beneath the nail, and so separating it from its bed. This ought to be done night and morning until the inflammation has ceased. If the pus is due to the breaking down of blood following a pinch (and then generally at the root of the nail), it is advisable to cut away the nail with a sharp knife immediately over the pus and let it out.

Cellular Whitlow.—By this term is meant an inflammation of the cellular tissue covering the terminal phalanx. Now in this situation there is no periosteum to the bone, its place being supplied by the soft tissues of the finger; consequently, when an inflammation attacks this tissue it strangulates the vessels running in it to the bone, and so cuts off the blood supply, and as a result of such a proceeding causes the phalanx to necrose.

This form of whitlow, like most of them, is the result of some injury, and is accompanied by great pain, for in this situation the skin is very highly sensitive, containing many tactile corpuscles; consequently, the pain, until the tissue is thoroughly destroyed by inflammation, is extremely severe. The part is swollen, tender, tense, and sometimes red; the patient is restless, and until tension is relieved, may have constitutional symptoms. It is important in this whitlow to cut freely and boldly down to the bone, and although no pus may escape such an incision will free the tissues, and so, if done early enough, will save the patient from suffering great pain, and will probably prevent necrosis of the phalanx which constantly happens when such prompt treatment is not pursued. In these cases you must incise freely to the bone; for, as in periostitis elsewhere, it would be useless to only cut into the soft parts and not to divide the periosteum through; so the same argument holds good in cellular whitlow, for the cellular tissue represents the periosteum. In neglected cases the terminal phalanx necroses and comes away. Now it is to the treatment of these neglected cases I wish especially to refer. When the bone has been removed the soft tissues shrink upon the epiphysis, which in nearly all cases remains, having the flexor profundus tendon attached to it; these soft parts contract and so pull on the nail and cause it to become curved and crumpled up. Now, I maintain that if the following plan of treatment be adopted, such a deformity ought not to arise. As soon as the necrosed portion is loose remove it by an incision along the palmar surface of the finger: Place a nar-

row splint on the back of the finger allowing it to project half an inch beyond the nail. Then take a piece of strapping about a quarter of an inch in width, and place one edge under the nail, then wind it round the splint so as to fix the nail firmly to the splint; by such a proceeding the nail will be unable to curl up, and so make a background upon which the new bone may be formed. Lastly, put sutures in the skin, and dress it antiseptically.

It is well known in cases of necrosis the new bone is formed from what remains of the peristeum, fascia, tendons and whatever was near the original bone. I, therefore, cannot see why new bone should not be formed from the cellular tissue surrounding the cavity from whence the phalanx is removed, and of course helped by the remaining epiphysis. By following this plan of treatment the new bone would probably be formed in somewhat the same shape as the old bone, and so prevent that clubbed and distorted condition so frequently seen. Even if such a result did not take place I think it only fair to give the patient a chance, especially those in the higher stations of life, in whom a deformed finger may be a source of annoyance.

Tendinous Whitlow is an inflammation in the sheath of the tendons over the first or second phalanx. It may arise from inflammation spreading from without, or by a purulent synovial sheath lining the fibrous sheaths and surrounding the flexor tendons. The great dangers arising from this form of whitlow are that the tendons may be destroyed, the inflammation extending into the joints, or the pus may find its way, particularly in the thumb and little finger, into the palm of the hand.

The symptoms are these: At first the part is very little altered in external appearance; soon after the finger becomes swollen and flexed, and generally in the early stage of the disease only that part corresponding to one phalanx is involved. The pain is of a severe and throbbing character, great tenderness, heat about the part, and in the latter stages there may be some deep-seated fluctuation, a very unfavorable condition. If this is allowed to progress, the whole finger may become involved, so as to present two swellings separated by a constriction corresponding to the joint; in fact, where there is less cellular tissue, and therefore not so much room for swelling. When the whitlow has arrived at this stage, fluctuation can generally be felt between the two tumors.

Periosteal Whitlow is an acute periostitis of the first or second phalanx, and resembles periostitis attacking any bone. This, as in other parts, may arise from blows, wounds, or constitutional affections. At first this is confined to the phalanx attacked, but if allowed to progress without proper treatment will end in destruction of the joints, or the matter may burst into the sheath of the tendons and cause destruction of them also. It comes on with severe pain, and many of the symptoms which occur in the tendinous whitlow; in fact, it is extremely difficult to diagnose one from the other in the early stages of the disease. Therefore I shall describe the treatment of the tendinous and periosteal whitlow together.

Always give an anæsthetic to a patient suffering from one of these severer forms of whitlow, as then you are enabled to thoroughly examine and deliberately open the finger.

Several methods of treatment have been advocated.

1st.—Open these whitlows with an incision down the middle line of the finger on its palmar surface.

2nd.—Mr. Christopher Heath advised when the finger had been somewhat neglected —that is to say, when the pus has burrowed backwards and is pointing over the metacarpo-phalangeal joints to make an incision over the joint and carefully dissect down on to the pus; then pass a director up the sheath of the tendon, and let the matter escape.

3rd.—The method of treating these whitlows by a lateral incision on both sides of the finger. This is the treatment I wish strongly to advocate. It has been mentioned by some authors, but only in a very cursory way.

The *disadvantages* liable to follow the *central* incision are these:

1st.—It is very difficult to tell whether the inflammation is confined to the tendon sheath or bone. Therefore by adopting the central incision, if it is a periostitis the tendon is cut through to reach the bone, which is needless, and of course damages the tendon.

2d.—The finger in this state of inflammation is flexed to relax the structures, so that when the sheath is opened to the median incision the tendon starts out of the sheath and thus pulls on the small vessles supplying it, as well as being pressed upon by the surrounding tissues, and so favoring gangrene of the tendons.

Therefore I must urge, if any one should think it right to follow such a method of treatment, they should do so only if they were sure the inflammation was confined to the sheath of the tendons, and if such was the case the advice of Prof. Pancoast ought to be followed, viz., "the incision should extend the length of one phalanx only; if this is not enough it is better to make a separate incision over another phalanx than to divide the whole length of the finger when the tendons would start from their sheaths."

The treatment pursued by Mr. Christopher Heath may be passed with few remarks, for such a proceeding could only be available when the whitlow had been greatly neglected and had extended into the palm. Then such a method would be extremely advantageous.

Treatment by Lateral Incisions.—In order to strengthen my views I have made many investigations on the dead body. On examining a dissected finger, it may be observed that the digital nerves are at the right and left anterior angles of the square, as has been represented in describing the anatomy of the finger.

The digital arteries being beneath them, again, as will be seen by a transverse section made about the middle of the phalanges, the arteries and nerves in the first phalanx are to the anterior surface of the finger; on the other hand, in the second phalanx the nerves are here also well to the anterior surface, but at the middle of this phalanx the arteries loop down nearer to a level with the bone Please pay particular attention to these facts, for reasons to be presently explained.

In inflammations giving rise to swelling of a part, the arteries are pushed up with the cellular tissue in which they are contained.

Now in the finger such a condition would tend to bring the arteries and nerves well forward, and more away from the bone, especially

in these forms of whitlow, as the pus which is forming is either in the sheath of the tendon or around the bone. Therefore I should advise, when incising a whitlow involving the first phalanx, to make the incision midway between the anterior and the posterior surfaces of the swelling for nearly the whole length of the phalanx down to the bone on both sides of the finger. If no pus escapes from beneath the periosteum turn the point of the knife a little forwards towards the palmar surface, and open the sheath freely. Should pus flow from the tendon sheath pass the smallest-sized drainage tube or a thin piece of oil-silk across the finger from one side to the other under the tendon.

In the case of a whitlow involving the second phalanx, pursue exactly the same course, but with this exception, viz., make the incision at the juncture of the posterior third with the anterior two-thirds of the breadth of the swelling.

After the whitlow has been freely opened, flex the finger to relax all the structures, and keep it in this positinn, applying some warm antiseptic, as carbolized wool soaked in warm carbolic, to which opium has been added.

The *advantages* I claim for this method are the following:

1st.—As it is difficult to tell whether the whitlow is periosteal or tendinous, by the lateral incisions, if it should be periosteal, no damage is done to the tendons by cutting through them.

2nd.—By lateral incisions the tendons cannot prolapse from their sheaths, and therefore the liability to gangrene is dismissed.

3d.—After this method of treatment the finger can be flexed and so relax all the structures and relieve pain, whereas by the central incision the finger ought to be kept straight to prevent the tendons slipping out of their sheaths; at the same time straightening such an inflamed part greatly increases the pain.

4th.—If the incisions are on the sides they are less likely to be pressed upon, for the cicatrix may become tender, which, if in the centre of the hand, is exposed to pressure every time the hand is closed. Again, a cicatrix in the middle line may contract and cause the finger to become permanently flexed, whereas if the incisions are at the sides, such a result could not take place.

The only disadvantage that I can see, and which I do not admit as such, is that the nerves and arteries may be wounded.

Now in a dissection of a finger it will be seen that the *nerves* are well to the front of the fingers, and if the rules I have suggested be followed they ought never to be wounded.

With regard to the *arteries* in the first phalanx, these are also to the front of the fingers, and therefore out of harm's way. In the second phalanx I admit they may be injured, as the artery in the middle of the phalanx loops rather low down to the side of the bone. But surely the fact that such a small artery as the digital may be wounded never would deter a surgeon from cutting in its neighborhood, for if it be wounded it can easily be controlled. Therefore, after discussing, I hope fairly, the pros and cons, I can see only every advantage to be gained by treating these whitlows by lateral incisions.

While I was house-surgeon, several such cases were treated by lateral incisions with most satisfactory results. Unfortunately, press of work prevented my taking notes of them.—H. W. ALLINGHAM, late House-Surgeom St. George's Hospital, London, England, in *Medical Press and Circular.*

THE PRESENT STATUS OF BACTERIAL PATHOLOGY AND ITS RELATION TO THERAPEUTICS.—In an article on this interesting topic by DR. A. N. BLODGETT appearing in the New York Medical Record, Nov. 13, 1886, the author thus summarizes the present application of the germ theory of disease in therapeutics:

The radical fact, however, still exists, that all the researches in the bacillary origin of diseases have not yet led to any form of treatment for their relief which is in any way consonant with the importance of the case, or, in any adequate measure meets its requirements. The existence of bacilli is still only a luxury in diagnosis, not an indication in the choice of treatment. The known existence of the bacillus tuberculosis has not, then, added any material benefit to the methods of treatment in that disease to what was known previous to its demonstration. There has, doubtless, great good come from the extensive researches to which the discovery of the various germs occurring in or accompanying the bacillary diseases have given rise; but thus far we have not attained the greatest and most valued result—the indications for a better mode of treatment. The great value of bacillary examination, and the fatal import of their detection, have suffered a material and wholesome diminution from the repeated experience that patients with unquestioned bacillary development in their bodies have quite recovered from all symptoms of the bacillary disease, and have acquired good health again.

The greatest claim which has been advanced for the bacillus of tubercle therefore falls at once to the ground; for the chief importance which at first attached to the presence of this organism was as an aid to diagnosis, and a positive indication in prognosis in this affection. The bacillus has been proved to not only diminish, but to disappear entirely in cases in which it was undoubtedly present. The discovery of the bacillus was unquestionably an advantage for purposes of diagnosis, but the value to be derived from the detection of this organism was greatly overestimated.

The treatment which has thus far been advocated consists only in the extermination of these low forms of life, by means of the destroying action of some agent capable of annihilating them. The human organism is so delicate that many, and indeed most, of these means cannot be safely employed. The measures adopted to drive out the unwelcome guest would surely kill the unwilling host. We do not yet know how to bring our remedies into all the parts of the body in which it is desirable that they should operate in order to expel the organisms of disease. Thus we are left in nearly the same position as before the discovery of the bacillus, as to the cause and substance of the disease.

This is not, however, altogether true in regard to prophylaxis, and especially in relation to that element of treatment, which may be generally denominated "hygiene." We have become acquainted with the character of a new

organism, we have learned somewhat its habits, its mode of growth, its conditions of propagation, and we have ascertained some of the conditions under which these organisms will not thrive, or under which their development is hindered or quite prevented. Thus we know that a certain elevation of the temperature is essential to the development of certain disease germs, and we at once conclude that if the temperature can be kept below the danger-point, the development of that particular germ may be prevented. We can thus account for the benefit accruing from removal to a favorable location, and this also in part explains how a particular place may become a sanitarium for persons afflicted with certain classes of disease. The amount of certain gaseous constituents of the atmosphere is thought to have a determining influence on the development and growth of certain forms of germ-life, and this may retard their spread in an organism in which they have already gained a foothold. They may be supposed to live a long time under unfavorable conditions, and thus we see the patients who are benefitted by a temporary stay in a health-resort, on returning to their homes, immediately fall victims to renewed attacks of the old enemy. We may in this way also understand how a health-resort may deteriorate after a time, when the soil and air become impregnated with the constantly increasing amounts of the diseased material brought to it by large numbers of invalids, until the entire surroundings may become charged with the virus of disease, and the locality is no longer a health-resort. This much we may claim to have gained from the study of germ-pathology, and the value of this study none will deny; but our misfortune is, that this is *all* we know at present about the treatment of the tubercle bacillus or tuberculosis, in the present signification of the word; and all this we were accustomed to practically employ before the existence of the bacillus had been proved. We sent our patients to the same health-resorts before the demonstration of the bacillus that we now recommend, and we employed the same general treatment which we now prescribe, and we attained practically the same, or at least similar results. True, some enthusiastic practitioners have launched upon the profession a variety of methods for the exterminative treatment of all bacillary diseases, and we have the announcement of intra-pulmonary antiseptic injections, of various inhalations, and of a host of other attempts to hunt out the wily bacillus in its lair in the pulmonary parenchyma, or in other remote tissues of the body. We have methods recommended, and sometimes warranted, to penetrate the residual air, and thus turn the interior of the lung into a reservoir of antiseptic vapors, but the proof of the actual accomplishment of these objects is yet to be demonstrated. What is true of tuberculosis also holds good in regard to other bacterial disorders.

The most imperative need of the day in bacterial pathology is the discovery of some means whereby the germs which are proved to exist in certain diseases may be acted upon in the tissues of the body by some agent which may cause them to disappear, and at the same time the remedy should not injuriously affect the parts locally or the system at large. When we have the power to thus influence the development of germ-life, and can reach these organisms in the organs and structures of the animal body, we may hope to properly utilize the knowledge we now possess of the influence exerted upon the animal economy by the various forms of bacterial life.

It is, however, to synthetical chemistry that we must look for the fulfilment of this earnest hope. The resources of our present remedial measures are now known with a fair degree of accuracy, and it is not probable that we shall acquire the desired relief from any means at present in our possession.

The requirements of bacterial therapeutics are such that none of the known remedial means would serve the double purpose of destroying the bacteria and leaving the human organism uninjured. The character of the agents thus far known to possess the properties of a germicide are those of a chemical incompatibility, or of a corrosive or otherwise local and individual character. With all our knowledge, we yet know of no way to cause the disappearance of bacillary forms except by the actual and injurious contact of the remedy employed. This method of treatment is necessarily restricted to close range, and cannot be employed as treatment for the internal conditions arising from, or associated with, the development of bacillary diseases. It is not, however, necessary to give up the hope that the startling discoveries of the last few years may not yet be crowned by the the greatest of them all—the discovery of some means of safely combatting the various bacillary organisms in the hidden and inaccessible recesses of the body. We need not yet take the gloomy view at present held by an eminent practitioner who recently stated that the discoveries of the bacillary forms constitute an interesting but profitless epoch in medical science, to which he gave no heed, except to regret it, inasmuch as it only serves to show our inability to consider medicine a satisfactory science, either in the way of successful study or logical research. He further stated that he should take no heed of the new pathology until he were furnished with some remedy which would exterminate the bacilli without at the same time killing the patient.

The diagnosis in questionable cases will doubtless sometimes depend on the presence or absence of the special bacillus. The praxis has already adopted this method of fortifying diagnosis. This in itself is a great benefit to the science of medicine; but it is to be hoped that other and more important benefits will accrue from the discovery of some means of eliminating the germs of disease, by which the severity of the malady may be mitigated. Judging from the results of experiments thus far made, there is not a favorable prospect of immediate success in the search for means to directly influence the development of pathogenic organisms in the living body of the patient.

All the greater importance is therefore to be laid on the prophylactic treatment of this class of diseases. This should consist, in part at least, in the careful destruction of the bacilli by the strenuous disinfection of all objects which have been in contact with the patient, or have been in any way soiled by the secretions or excretions from the disease. Measures should be also taken to protect healthy individuals from any contact with the emanations from

the sick. Any measure of protection which does not insure the destruction of the bacilli is useless, as it fails to accomplish the only radical and necessary object of prophylaxis. The sick should not be permitted to mingle with those who are well, but should be secluded as far as practicable in the case.

To the *prevention* of bacterial disorders, therefore, rather than to their cure, should our present efforts be directed. We do not know how to affect either the progress of the disease or to cause its subsidence. We do know, however, in some degree how to mitigate its severity, and we have learned that under favorable conditions we may sometimes hope to see the patient recover from all traces of the bacillary affection.

Let us trust that the efforts of the great number of arduous laborers in the domain of experimental pathology may yet be crowned by the discovery of the means of controlling germ development in the human body, and thus complete and finish one of the grandest labors in medical science which the world has ever looked upon.

When we possess the means of preventing bacterial growth and dissemination, we have the power to stem the spread of epidemic diseases which now so often fill nations and continents with terror. Cholera, tuberculosis, smallpox, diphtheria, and a host of other maladies will then be susceptible of rational and restrictive treatment, and the sum of human woes materially diminished. Surely nothing could be more attractive to the mind than the hope of achieving this priceless boon for humanity. From the triumphs of the past we may augur the future. We are able to confer the blessed gift of anæsthesia upon the agonies of operation or injury, and may we not hope that the earth is yet to be blessed with the means of controlling epidemics? The traditions of our science are full of examples which should give us renewed faith in its resources. We are now face to face with an unsolved problem of the greatest importance. Let us each endeavor to do what in us lies to aid in its solution.

THE TREATMENT OF COMSUMPTION BY INTRA-PULMONARY INJECTIONS—REPORT OF A CASE OF RECOVERY.—Local applications are naturally regarded efficacious in all forms of structural diseases whenever they can be practiced.

In respect to the lungs, the experiments which have been made of late years not only demonstrate conclusively the practicability of local medication in diseased conditions of these organs, but also that decided benefit oftentimes results from such treatment. I need not comment upon the unsatisfactory effects of the methods of treatment at our disposal in the past, for the relief of patients suffering from phthisis, for, alas! the mortality reports speak more eloquently than words, affording too frequent and far too numerous examples of the destructive march of this justly dreaded destroyer of human life, as well as the impotency of our noble art to arrest its progress.

In November, 1885, I instituted a judicious trial of intra-pulmonary injections in some cases of advanced consumption while on duty as visiting physician to the Charity Hospital, where a large number of such cases were congregated. After a careful observation of the results of these injections I reported my experiments in the Medical Record, May 22, 1886. Among the cases at the time was a private patient of my friend DR. IRA B. READ, who has kept the case under observation since the treatment was commenced to the present time, and who, I have no doubt, will corroborate what I shall say concerning the benefit which has followed the treatment. So far as the method is concerned, I can assure you that my confidence in it increases with my experience, and the results compel me to accord to it an established position among the legitimate means at our command of battling against this formidable foe.

The cough, expectoration, and local soreness about the cavity were remarkably controlled by the intra-pulmonary injections. The debilitating night-sweats were always checked, while the patients undeniably improved in flesh and strength during the continuance of the treatment. When much dyspnœa was experienced the injections exercised a soothing influence upon the respiratory centres, while the appetite invariably received a material stimulus.

The physical condition of the cavity is changed; the walls become dry; the secretion is greatly lessened. In place of the loud, gurgling crepitation there is heard the large crepitation, which in turn is replaced by finer crepitation, until, after several administrations of the carbolized iodine, by intra-pulmonary injection, all moist râles disappear, and a pronounced "click" is detected. I regard the presence of the "click" a favorable indication, for it is only present when the necrotic process has been arrested, and denotes a marked tendency to inspissation of the cavity.

In the case herewith reported this "click" was very noticeable after the fifth intra-pulmonary injection, and a dry, cavernous sound in both expiration and inspiration was present later.

The injections have been usually administered once each week, and I have found that the lung manifested a greater degree of tolerance when the intervals were not prolonged and the operation was regularly performed. Some patients cough considerably after the first pulmonary injections, who manifest no irritation whatever after subsequent operations. The respiration usually becomes more easy and regular, while all the most troublesome symptoms are soon relieved.

I have been frequently asked what I expected to accomplish by this method of treatment, and my reply has been, *both local and general improvement.*

I look for such a modification of the condition of the cavity itself as will tend to arrest the formation of pus and encourage its cicatrization and contraction.

Some eminent authorities object that cavities do not contract, but my experience in this particular satisfies me that such does take place. The resistance which the needle encounters on entering the lung, after several injections have been practiced, cannot be solely due to the development of fibro-cellular tissue as a result of the treatment, but is, in part at least, occasioned by condensed tissue, the result of cicatrization with contraction. The

auscultatory and percussion sounds also denote when contraction has taken place. The resonance on percussion is less diffused over contracted cavities, and is easily demonstrated.

A prominent physician interested in this method of treatment of phthisis did not see how the pus in the cavity was disposed of, though he thought it might prevent the further formation of pus. Fortunately, nature provides the means of ridding the cavity of exuded pus by cough and expectoration, both of which cease when there is no longer cause for either.

When carbolized iodine is used for intracavernous injections, I expect, by the well-known influence of iodine, to disinfect the cavity and exert within it a remedial, alterative, and resolvent effect.

Taken internally, it is said to excite the appetite and give tone to the digestion; but as it irritates the stomach, it cannot ordinarily be taken in this way. Introduced into the system by intra-pulmonary injections, its good effects are all realized, and without the least risk of disturbing the digestive functions. Iodine sometimes exercises a remarkable emmenagogue effect, hence its great value in phthisis is not infrequently realized by restoring the uterine functions in young female consumptives, who always suffer from amenorrhœa. The sooner intra-pulmonary injections can be administered in such cases after apicial softening has positively taken place, the greater will be the probability of a return of menstruation, and an improvement of the lung condition proportionately increased.

The method which I have adopted of administering the lung injections is the following: If the patient is much debilitated, a stimulant is administered at least fifteen minutes before the operation. He is then directed to assume the recumbent position, with the head and shoulders slightly raised, and resting upon a hard bolster or pillow. This position is preferred to the sitting posture, as a better resistance is afforded posteriorly, and the patient cannot avoid the thrust of the needle as easily as the sitting posture would permit. Such an attempt on the part of the patient would be difficult to resist, and its execution might cause the operator to introduce the needle in a different place from that intended, if it did not materially embarrass its skillful and painless entrance into the diseased portion of the lung.

The syringe and needle should both be carefully cleansed with a solution of carbolic acid, and the pulmonary fluid warmed to at least one hundred degrees Fahrenheit.

After determining by careful auscultation and percussion the depth to which the needle should be inserted into the cavity, the little rubber guard, which is a useful adjustment to the needles made by Tiemann & Co., is set for the purpose of indicating and regulating the depth of penetration required. The patient is then directed to turn the head and face to the side opposite the one to be operated on, and to take two or three deep inspirations slowly; at the second or third inspiration, when the lung is well inflated, the needle, with syringe attached, is pushed through the intercostal space selected, with a quick, firm pressure, at right angles with the chest-wall, until the depth of penetration in accordance with the fixed rubber guide is attained. The fluid in the syringe is then slowly injected, and the needle quickly withdrawn. A small piece of adhesive plaster is placed usually over the external puncture, though it is not absolutely necessary. A knowledge of the relation of the first rib to the clavicle, and its direction, is necessary to avoid striking it with the needle. The first or second intercostal space, anteriorly, is generally selected, in accordance with the size and location of the cavity, and the point of penetration of the needle is usually in the nipple line or to its outer border.

If the needle is inserted within the nipple line, or too near the border of the sternum, there is danger of wounding some branch of the intercostal or internal mammary vessels and nerves. This precaution is more necessary on the right side than on the left, by reason of slight difference of distribution of these several vessels and nerves. Furthermore, in order to avoid the danger of shock, paroxysmal coughing, or hemorrhage, the fluid should be slowly injected.

On no account should the needle be inserted between the clavicle and first rib, as there would be danger of wounding the subclavian vessels, and on the left side the thoracic duct in addition.

Although I have always observed the strictest care when operating on the right side, it has been sometimes impossible to avoid troublesome paroxysmal cough, dyspnœa, and fibrinous expectoration. In one case cyanosis, with unilateral spasm, succeeded the operation on the right side, and, though apparently serious for a short time, nevertheless gradually abated without further trouble after several inhalations of a few drops of chloroform. I have not observed such phenomena when the injection has been confined to the left pulmonary apex, and I believe the chances of such occurrences would be lessened by inserting the needle a little outside the nipple line when operating on the right side. Should severe paroxysms of cough follow the operation at any time, and tend to be prolonged, I would advise the administration of a few drops of chloroform by inhalation, which will generally suffice to arrest the paroxysm.

I have used and found beneficial the inhalation of steam, medicated with a drachm or two of laudanum. Such treatment, however, is rarely required. It has only been necessary to resort to some such measure with two patients, both of whom manifested serious laryngeal complications, the presence of which alone seemed to excite and aggravate coughing. Every care should be exercised to avoid the superficial veins, and approximate as much as possible the lower border of the intercostal space, as the artery, you will remember, courses along the lower inner border of the rib.

For twelve or twenty-four hours after each pulmonary injection the patient should be kept in bed, free from all excitement, as any undue exertion of either a mental or physical character would tend to increase the force of the circulation and possibly precipitate hemorrhage.

I know that the operation has been performed and the patient permitted to walk home, but I feel obliged to advise against such practice.

An understanding as to what takes place at

the point of puncture in the lung substance is clearly explained by the experiments of Eugene Frankel (Deutsche Medicin Wochenschrift, 1882, No. 4, p. 51) upon rabbits, and to which my attention was kindly called by my friend, Dr. Edward Frankel, of this city. Solutions were employed of tartrate of alumina, two to five per cent.; carbolic acid, one to five per cent.; boracic acid, four per cent.; iodoform, five per cent. The above solutions were made with the finely triturated substances in olive oil, and parenchymatous injections of one gramme per dose, once to six times daily, administered.

He states that no especial reaction was manifested on the part of the animals; in a few of the cases there was slight cough during the injections.

The autopsies revealed a circumscribed croupous bronchitis. At later periods the pathological changes due to the trauma in the lungs consisted of slight hemorrhages into the pulmonary parenchyma, but confined to the point of puncture and its immediate neighborhood, which undergo the customary changes, with pigmentary deposit, and finally disappear entirely. There were also disseminated deposits, varying in size from a hemp-seed to a cherry-pit, situated sometimes on the surface, at others in the deeper layers of the parenchyma.

These deposits are at first of a blackish- or browish-red color, and at a later period assume a reddish-gray or pale grayish-yellow color. when iodoform had been injected the deposits were of a sulphurous yellow hue.

On microscopic examination they presented a massive desquamation of alveolar epithelium. These deposits, he further says, disappear either by absorption or cicatrices of about a millimetre in thickness, in which loose connective tissue replaces the pulmonary parenchyma at the end of six weeks after the injection. Such important changes occurring, the advisability of keeping the patient quiet after each intra-pulmonary injection, for at least a few hours, will be apparent to you all.

Frankel remarked as a result of his experiments that he believed the human pulmonary substance would prove receptive of antiseptic injections, the technical difficulty of the operation being slight.

He thinks the injections might be practiced with benefit in catarrhs of the apex or apex infiltrations, and in certain cases of putrid bronchitis or pulmonary gangrene.

My practice is to commence with ten or fifteen minims of the carbolized iodine solution, and increase the amount five minims each week until forty minims are reached, which are then injected weekly or fortnightly, as the exigencies of the case require, antil local indications for continuance of the treatment are no longer present.

While the patient is under this treatment we should not loose sight of the necessity for such general remedies as are known to promote digestion and assimilation, as well as tend to help store up fat. Disagreeable dosing, as well as too much dosing, should be studiously avoided.

[The author here cites in detail the progress of the case, which we omit.]

—Dr. John Blake White, in *N. Y. Medical Record*, Nov. 13, 1886.

Glacial Acetic Acid for the Removal of Papilloma, pigmentary Moles and Superfluous Hair.—Dr. J. W. Carpenter, in a recent number of the Cincinnati Lancet and Clinic, discusses as follows the application of acetic acid in the removal of facial blemishes:

Various are the methods for removing defects and eradicating diseased excrescences in the early stages.

These methods vary in the ease of application, the time required, the amount of pain caused, and the nicety of the result.

To call forth an expression of the various ideas, and especially experiences in this department is the object of the presentation of one simple method, with report of cases.

Though the weightier matter of grappling with disease and death occupies most of the physician's time, there are lesser ills, whose removal gives comfort, and where there is also an ample field for skill.

Warty growths, pigmentary moles, and superfluous hair in conspicuous places have sometimes given as much discomfort as Byron's club foot. And a patient is often as grateful for freedom from a defect as for being rescued from a dangerous typhoid fever.

Among the many remedies for such cases glacial acetic acid has some qualities that highly recommend it:

First, its caustic properties are superficial, it does not sink into the tissues, and thus the depth to which one wishes to penetrate can be easily controlled.

Second, it is painless when applied with proper care, the most that it causes being a little itching or very little smarting after the skin is broken.

Third, there seems to be no necessity for a resulting scar. In the many cases in which I have used it there was not left a mark of any kind, except in two, where, in spite of warning, the patient could not resist the temptation to pick at and pull off the little scab as it formed. A slight depression was the result.

The following reports will show the efficacy of this preparation in various affections.

Case first illustrates its use in pigmentary moles on the face, where nicety of result is the great desideratum.

A fine looking young lady of the brunette type was annoyed by one of these discolorations on the cheek, a little in front of the ear. It was about the size of a ten cent piece, and a little elevated above the surrounding skin. The acid was painted upon the surface and not allowed to pass over the edges. After several applications with two to five minutes' interval, the upper part was softened sufficiently to be removed with a little pine stick. One more application was made, when the tissue was softened to the required depth and removed as before. When the level of the surrounding skin was reached no more pigmentation remained. A thin scab formed, and when this fell off and the little resulting redness had disappeared, there was an even surface of skin of natural color. There was no scar nor any trace of the former mole.

When these discolorations are elevated above the skin, I have so far removed them in this way, leaving, as in the case reported, an even surface of natural color, and no scar. If they

are simply discolored spots and not elevated, there is left necessarily a little depression, and when one prefers the slight depression to the pigmentation, they can be removed.

The second case shows the efficacy of this preparation in a different class of affections, viz.: that of superfluous hair.

I was requested to remove quite a conspicuous beard from the chin of an otherwise fine looking lady. This superfluity was easily disposed of in the following manner, taking out, of course, one hair at a time.

A litle pine stick, sharpened to a very fine point, is dipped in the glacial acetic acid and applied to the skin by the side of one hair, this hair being put slightly on the stretch, either with the fingers or fine pincers. The skin, after touching it several times with an interval of a few moments between, is soon softened so that the point can enter the hair follicle. The hair then comes out easily, and another application is made, letting the point pass as deep into the follicle as it will.

Sometimes I have used the head of a needle for the last application, the eye of the needle holding the aid, which is thus carried to the bottom of the follicle.

About ten hairs were removed at a sitting, and when the work was completed the face presented a different aspect minus its appendages.

Of course in removing many hairs close together there is some danger of changing the natural appearance of the integument from this fact. In destroying the hair follicle the sebaceous cyst is also often destroyed, and if many of these are wanting it gives a dry or even glazed appearance to the skin. This result follows no more from this method, however, than from any other, as electrolysis.

In this case the hairs, though coarse, long, and very conspicuous, were not so closely situated that enough of the sebaceous cysts were destroyed to change the texture of the skin. The soft, fine hairs were allowed to remain.

When the growth is fine and close together, electrolysis would be a better way, but when not too close, or in cases of isolated hairs, this means is very simple and efficient.

Case third represents another class in which this remedy is useful. Miss H. was the possessor of a curious little growth on the inner aspect of the thigh. This excrescence she wished removed because she feared it might increase in size, and also because with the dimensions it then had, it was often irritated by the clothing.

The general outline of the little tumor was spherical, with a diameter of $\frac{3}{4}$ of an inch, and it hung by a pedicle $\frac{1}{4}$ of an inch in diameter. The surface was corrugated, but smooth to the touch, and of a brown color.

The glacial acetic acid was applied around the pedicle with a little, pointed pine stick, several times, with, as usual, a few moments interval between, until the skin was softened and could be separated. As the patent had but little time to wait, this case was finished differently. A little strip of absorbent cotton, saturated with a two-per-cent. solution of cocaine was placed around the pedicle and inserted between the edges of the severed skin. This was applied twice, waiting about a minute each time. The rest of the pedicle was then severed with the knife with the loss of about a teaspoonful of blood. The patient was not aware that the knife was used or one drop of blood lost, and the object was accomplished, viz.: to remove the excrescence without any sensation to the patient. She expressed her appreciation of the method by saying she would not have known that anything had been done. No dressing was used, and no soreness resulted.

Inspection of the growth after removal showed it was not solid, and of a warty nature, but its bulk was made up of the thick corrugated walls of a little sac. The inner surface was smooth and glistening, but the sac was not distended with any liquid.

On questioning the patient it could not be discovered that at any time it had contained fluid, as she said she was not aware of it ever having been different or larger previous to the day of removal.

Severing the skin first in this painless manner prepares the way for the use of cocaine and the knife, if it is preferred. When only the acid is used all bleeding is prevented, unless there are vessels of some size, and even then they may not always bleed.

Case four is one of more importance, and shows the safety of this remedy in a graver class of cases.

Mrs. A., aged about sixty, came to consult me about the removal of a large warty growth on the bridge of the nose. She feared it was either a cancer or would take on eventually a cancerous degeneration.

The growth had an almost circular base about three-fourths of an inch in diameter. The elevation at its highest part was half an inch. The surface was rough, cracked, and had bled at points. The whole was encircled by a hard, inflamed ring.

To test the nature of the case, soothing applications were prescribed to be applied several times daily upon this ring to see how much the inflammation could be reduced. In three weeks the redness and hardness had so far disappeared as to make it seem safe to remove the growth by this method.

As a large scar in so prominent a place would be only less unsightly than the growth itself, it was necessary to proceed with caution. She being elderly and in rather feeble health, it was safest to test the healing power of the skin first by applying the acid to a very small part in the beginning. Accordingly it was applied at the base on the left side and a separation of one-sixteenth of an inch effected. No irritation was set up, and it healed perfectly.

After waiting nearly two weeks, the healing power of the skin having proved to be excellent, the removal was again begun, and a little done each day, until after ten sittings the last part of the mass fell off. A scab formed over all the surface, and when this fell off there was healthy skin beneath. And when after a few weeks all redness had passed away, there was no scar nor the least trace of the former trouble.

The patient of course was extremely grateful to have that feature just as nature made it in the first place.

The face was watched carefully for any return of the growth, but the skin remained perfect until the patient died four years later of pneumonia.

Many vegetations of the skin, as small warts

on the face, and those little excrescences on the neck and shoulders that hang by a little pedicle or are cone shaped and attached at the base, are easily and quickly removed in this way, and no soreness results.

The application is of course made at the point of attachment, as it is not necessary to soften the whole mass.

For protection, is is well to put a little soap on the surrounding skin.

For the large growths, if the patient is nervous or imaginatively sensitive, after the skin is broken, cocaine can be applied, and then the process continued.

The various other means, electrolysis, solution of potassa fusa, concentrated lactic acid, etc., have their advantages and advocates. No one method is perhaps equally suited to all cases or succeeds equally well in all hands.

It is not meant to laud this plan above all others, but simply to mention it as one that is safe, painless, and can have a perfect result without a scar.

Bones as Food food for the Teeth.—In the discharge of their duties the physician and dentist are daily asked by their patients—"What must I do to prevent my teeth from decaying?" The answer must be, "Correct your diet." That is, each such food, and only such, as contains all of its natural elements. If we eat the products of grain we must eat them with all their elements as furnished by nature. If we eat meat we must eat bones, or our systems will suffer from a violation of one of nature's unerring laws.

Dental development in man is discernible as early as the seventh week of intra-uterine life, hence the importance of a strictly correct diet from the start, if mothers wish to give birth to children who will have perfectly formed teeth. A mother who passes through the periods of gestation and lactation without a sufficient supply of bone and tooth element in her food, will suffer from decay of the teeth, accompanied with pain and suffering in proportion to the extent of the deficiency. The lime from her teeth will be dissolved, taken into the circulation, and appropriated by the offspring.

Excepting civilized man, all flesh-eating animals eat as much of the bones of the animals they devour as they can break with their teeth sufficiently fine to swallow, and all have good dental organs.

Place before a tribe of Indians everything the earth produces in the shape of food, and they will eat only animal food so long as that lasts; but place them upon a reservation, and feed them as civilized people feed themselves, and they, too, soon suffer from decay of the teeth. Take from either of the above classes their supply of bone which they can get with their animal food, and decay of the teeth is sure to follow. Even our domestic herbivorous animals thrive better by having bone added to their bills of fare. The cow which every year gives birth to young has an excessive drain upon her for bone material, and craves bone to such an extent that she will even try to masticate very large ones, as every farmer boy can testify.

Veterinary surgeons have long known that certain diseases of their dumb patients can only be successfully treated by feeding them with bone meal.

Persons engaged in raising poultry know that their birds must have lime supplied to them or they will furnish only soft-shelled eggs.

Bone is now acknowledged to be the best fertilizer for farms. Visit one of these farms in the month of June and you can count the hills half a mile away, where the corn grew three years before, by the spots of grass which stud the earth at regular intervals. The farmer will tell you that bone did it. This evident deficiency in the soil explains the too apparent lack in the products of the soil.

The educated farmer analyzes his soil to discover the elements that produce his crops. The intelligent stock-raiser informs himself as to the requirements of his stock; yet neither appear to realize the greater importance of carefully regulating his child's diet, and diligently supplying the needed elements.

Arguments in favor of eating bone to prevent decay of the teeth, as well as to cure a long list of bone and kindred diseases, might be continued indefinitely; but as a word to the wise is sufficient, it seems only necessary to add that a long and continued experiment has been made upon a family, the results of which fully justify all claims. The bones were selected from perfectly healthy animals, none being used that bore any blemish of abnormal growth. They were carefully cured without being allowed to pass through any perceptible chemical changes, and were carefully granulated and incorporated into soups, gravies, bread, etc., in the proportion of from one to three spoonfuls to each pint of soup or gravy.—*Health*, Sept. 10, 1886.

[It may be interesting to note in this connection that a preparation of Powdered Bone was introduced a short time ago at the instance of Dr. R. J. Nunn, by Parke, Davis & Co.]

The Use of Ice-water Enemata in the Treatment of Diarrhœa.—This means of treatment has frequently been adopted in cases of collapse occurring during the diarrhœa of young children at the Birmingham General Hospital. In cases outside of hospital practice, I have found this method not generally known. Being convinced of its utility, I am tempted to record my experience.

Ice should be dissolved in water, and from two to three ounces injected. The immediate effect is commonly a quiet sleep and improvement in the collapsed condition. Subsequently, the effect upon the diarrhœa is also good, and it will rarely be found necessary to repeat the enema. Internal treatment may often have to be continued, but I have no doubt that the life of many a collapsed child has been saved in this way. No reference is to be found in Ringer's Therapeutics to this method of treatment, but doubtless it is known to many of the older practitioners, though its disuse has led to its being unknown to the younger members of the profession. It appears probable that it acts by an astringent effect on the loaded vessels of the intestines, and so at the same time warming the exterior of the body, and diminishing the materials for the intestinal flux.

It has sometimes been found expedient to give a few drops of brandy about the time of injection; but, in my experience, no depression or bad effects have resulted.—Robert M. Simon, B. A., M. B. Cantab., in *Brit. Med. Jour.*

The Medical Age.

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Original Articles.

CHICAGO MEDICAL SOCIETY.

OFFICIAL REPORT.

Stated Meeting, Nov. 1, 1886.

E. J. DOERING, M. D., President, in the chair.

DR. ALBERT E. HOADLEY read a report of

FIVE CASES ILLUSTRATING A TREATMENT OF THE MORE SEVERE FORMS OF STRICTURE OF THE RECTUM.

Case 1.—J. H. G., an engineer, æt. 40, with history of piles of eight years' standing and stricture two years. Examination revealed a hard carcinoma of the rectum within one and a half inches of the anus, immovable on account of adhesions to the sacrum. The adjacent parts were involved and the bowel completely occluded. The general condition of the patient was bad. Abdomen swollen and very tender. Had not had a passage from the bowels for two weeks. Could not take food without immediately vomiting. Pulse feeble, 120; temperature, 102°. At the first examination DR. HOADLEY succeeded in separating the adhesions sufficiently to pass a syringe-pipe beyond the immediate stricture. A half-pint of soap-water was injected a number of times during the afternoon and evening, with the effect of bringing away considerable matter and gas and giving great relief to the patient. Three operations were performed at intervals, by which a fair canal through the cancerous mass was made, but without relief to pain. At the fourth operation the lower end of the growth and sphincter ani were divided with one stroke of the knife. There was little hæmorrhage. The relief obtained by the division of the sphincter was ten-fold greater than that from all the other operations.

Case 2.—A laborer, forty-two years old, with history of hæmorrhoids, and stricture of five years' standing. Examinations revealed a firm unusual stricture within two inches of the anus. Syphilis could not be excluded and he was put on large and increasing doses of pot. iodid., and a systematic dilatation with an elastic bougie commenced. After four weeks a bougie one inch in diameter could be passed without difficulty. There was no particular irritation at the seat of the stricture, but the bowels were very irritable and there was an increasing diarrhœa. The stricture and sphincters were thoroughly divided and the wound packed with gauze on which dry per-sulphate of iron had been sprinkled. Relief was immediate and complete. Examination two months after the operation showed the wound to be nearly healed and the patient feels better than he has felt for a year previous.

Case 3.—An American woman, aged thirty-nine, the mother of three children; she had a stricture of nine years' standing. When the stricture was divided it was found that the rectum contained a carcinomatous mass, almost occluding the canal, higher than could be reached with the fingers. The sphincters were divided back to the coccyx and an incision was made through the mass nearly to the sacrum, and a piece of gauze pressed on the wound to prevent bleeding. A large-sized drainage tube was placed in the bowel above the disease. The rectum was packed and all secured with a T bandage and the patient put to bed. After the fifth day she rapidly improved and left the hospital within a week after the operation. Three months afterward she was comfortable and had gained six pounds.

Case 4.—A German woman of fifty-six years, the mother of several children. She had enjoyed good health until the development of the stricture of the rectum about three years before. The stricture and sphincters were divided, and on introducing the finger the bowel was found blocked up with other strictures of a malignant character. These were dilated with the fingers. A violent inflammation supervened and the patient's life was threatened. She made a slow recovery and was convinced that she was made worse by the operation. DR. HOADLEY thought that if the strictures had been incised instead of divulsed, the patient would have derived benefit.

Case 5.—An American of 67 years, the mother of four children. Labor had always been normal and easy. She had a stricture of five years' standing. Examination revealed two or three open sinuses and fluctuating abscesses in the ischio-rectal region. The abscesses and sinuses were opened and packed with iodoform gauze and the stricture divided, the sphincter being simply dilated. Great relief followed the operation which was made to relieve pain and not with the hope of prolonging life. From

a study of these cases, Dr. Hoadley deduced the following principles:

First, it is dangerous to practice divulsion of malignant stricture of the rectum: second, division of a severe stricture of the rectum without dividing the sphincters is of little practical value and has no tendency to cure; third, division of malignant strictures with the sphincter gives great relief and tends to prolong life; fourth, division of severe non-malignant stricture with the sphincters gives great relief and tends to perfect cure; fifth, division of both stricture and sphincter, whether malignant or non-malignant, is not attended with danger. Therefore we may conclude, that in all severe strictures of the rectum, whether malignant or non-malignant, complete division of the stricture and all the tissues below it back to the tip of the coccyx affords the greatest relief and and of the non-malignant strictures, the best means of permanent cure at our command.

Dr. J. Frank thought that if the author had divided his paper into relief for malignant strictures, and treatment for non-malignant strictures, it would have been a better classification. He had not had much experience with malignant strictures, but had divided one in the manner described by the author, by cutting down through the cellular tissue. He thought there was little danger in performing the operation, and was surprised at the small amount of hæmorrhage. But the benefit from the operation lasted only for a short time; there was relief at first but in six or eight weeks the same symptoms returned. Even in extirpated cancerous growths, as far as his information went, they generally return within a year. He had had one case in which the whole cancerous growth was extirpated, but in six or eight months it commenced to return and in a year's time the patient died with cancer. He thought that in dividing the strictures care must be taken not to go too far up the bowel, as the peritoneum might be cut into.

Dr. A. E. Hoadley in closing the discussion said: Dr. Frank suggests that we be careful in dividing the strictures high up. I think if we do not divide them higher than we can reach with the finger, dividing them in the posterior line, there is little danger of opening the peritoneal cavity. The peritoneum does not come down as a rule, where it can be reached with the finger. In regard to hæmorrhage, those cases sometimes bleed profusely even though they are divided right in the median line, where we least expect to find blood-vessels; the tissues become vascular, new vessels form, and it is necessary to tampon the wound and and in doing so it is best to put in a tube to relieve the bowels of gas. The suggestion made in reference to the division of the paper is quite proper; perhaps it would have been better to have said, report of cases illustrating a treatment. The treatment is palliative in malignant strictures, and in non-malignant strictures sometimes effects a cure. In answer to the question how many inches up may we go: it is a rather difficult matter to reach the peritoneum of the posterior wall of the rectum with the finger, even if the sphincter is divided; you can reach about four inches with the finger by pushing hard, and I think I would hate to divide a stricture further than I could reach with my fingers. Even the inferior mesenteric artery (superior hæmorrhoidal) comes down sometimes before it bifurcates into the lateral branches, within reach of the fingers and may be divided, but that is no drawback to the operation, because you can put a tampon into the rectum so firm that all hæmorrhage can be perfectly controlled and on the next day you may remove about half of the tampon to relieve tension, and the remaining half will tumble out itself three or four days later. It has been my experience, and it is on the authority of the text-books, that the vessels there can be controlled with the tampon very securely and with perfect safety. It is best to prepare for it and always tampon where you make that division, because moderate hæmorrhage is sometimes quite persistent.

Dr. A. J. Ochsner read a

REPORT OF A CASE OF ACTINOMYCOSIS,

with exhibition of patient. The patient, a stock raiser, æt. 56, entered the Presbyterian Hospital of Chicago, October 13, 1886. Until the autumn of 1877 the patient was in perfect health, following his occupation of stock raising. At that time he was exposed to drafts of cold air during a journey, and experienced severe neuralgic pains in the left antrum of Highmore. He had seven teeth taken from his upper jaw, from which all the other teeth had previously been removed, but these proved to be sound and he obtained no relief by their removal. For six months he suffered excruciating pain in the left antrum and in both eyes from sunrise until sunset. In 1878 there was a spontaneous opening of the abscess into the pharynx evacuating a considerable amount of pus and some blood, and giving the patient marked relief. A portion of the discharge usually entered the larynx at night, giving rise to severe cough. In May of that year the patient underwent a surgical operation, an opening being made into the antrum above the first molar and the cavity curetted and irrigated. The irrigation was continued two or three times daily for two years, during which time he suffered severely from pain and weakness. In the spring of 1882 the patient went to northern Mexico and spent the summer on the plains and among the mountains between that point and Colorado. His general health and strength were much improved. In July, 1885, the pa-

tient began to cough and continued to do so until his admission into the Presbyterian Hospital. During September, 1885 and 1886, he expectorated blood, but thinks it came from the posterior nares. Since the first of October, 1886, he has expectorated mucus and pus streaked with blood which undoubtedly comes from the lungs or bronchi. The patient has lost 37 pounds in weight during the past two years; his position is stooping, chest full in front and a decrease of motion on the left side with dullness, roughened respiratory sounds and numerous mucous râles. Below the upper border of the fifth rib and throughout the right side the sounds are normal. The history of the patient led to a suspicion of actinomycosis of the left lung, which had primarily existed in the antrum. By a microscopic examination of the sputum the characteristic fungus was at once found confirming the diagnosis beyond a doubt. DR. OCHSNER considered the following facts of practical interest in connection with the case:

The patient has been engaged for more than 40 years in raising, buying and selling large numbers of cattle. Many of these amimals suffered from lumpy jaw, and it was his practice to cure them by freely opening the abscess, by crucial incision, extirpating as much as possible of the lump and introducing about one drachm of powdered arsenic into the cavity. Repeating this once or twice usually effected a permanent cure.

DR. R. H. BABCOCK said, the case is one of exceeding interest from its rarity, and particularly as it is a case occurring in this country and one of very few that have been recorded, and in this case the diagnosis is so unquestionable that the interest is all the greater. We know that in cattle the disease is manifested by tumefaction in various organs, whereas in human beings it is by suppuration and metastatic abscesses. The disease in the human being may effect any of the organs, not merely the lungs, but particularly the viscera of the abdomen. I would like to ask DR. OCHSNER if there are signs of the disease having attacked other parts of the body than those mentioned, any symptoms which lead him to infer that the digestive organs or the stomach are infected.

DR. R. TILLEY said, this is certainly one of the most interesting questions that have been brought before the society for a considerable time. In the case presented to-night the disease seems to have originated in the antrum, and is, therefore, especially interesting to those engaged in treating affections of the nose and throat, and the teeth; as in the history of this case, there is a considerable amount of pain associated with the eyes, it is of interest to the ophthalmologist, and as it is now associated with the lungs, it is of interest to those engaged in the study of affections of the lungs. As this case together with the last case presented to the society, in all probability constitute the only indisputable cases that have appeared in English literature, I think it would be of sufficient interest to the society to ask DR. OCHSNER to carry the investigation still further and try and produce the disease by inoculation on one of the lower animals. I will move at the proper time that the Society place at DR. OCHSNER'S disposal the necessary funds. I would suggest that DR. OCHSNER accompany his report with a diagram of the fungus as it appears under the microscope. I have looked at the various schematic sketches that are published, and I claim that it would be absolutely impossible for any one with only the information afforded in these articles, without further study, to diagnose the fungi as they appear in the specimens presented. In DR. BELFIELD'S book I think the diagnosis is more in correspondence with those we see to-night, but those that are in COUNCILMAN'S article in Wood's Reference Handbook certainly do not present such an appearance.

DR. J. R. SKEER inquired the condition of the lung at the present time, whether cavernous or indurated.

DR. FRANK BILLINGS endorsed the remarks of DR. TILLEY, and thought the society should afford DR. OCHSNER means to carry on the investigation. It is not quite settled how this fungus is carried from one tissue to another; in in one case it has been proven that it was carried to the heart by ulceration into one of the jugular veins, and it is known that it will spread through contiguous tissue as through the diaphragm from the pleural cavity to the peritoneal cavity. A pure cultivation of the fungus has been made at Berlin.

DR. HAROLD MOYER said there is preat uncertainty as to the manner in which the fungus obtains access to the tissues. I would ask DR. OCHSNER if there is anything in the history of this case that would clear up that point. Two very interesting cases have been recently reported, in one case lung actinomycosis was diagnosticated during life, and after death of the patient a large actinomycotic mass was found in the lower portion of the upper lobe of the left lung, and in the centre of the mass a piece of tooth was found. ISRAEL (Centr. Bl. f. d. Med. Wessensch.) demonstrated actinomycosis in the sputum of that case, and so far as I know, it is the only case on record in which a diagnosis was made from the sputum. The other case bears on the manner in which the fungus obtains access to the tissues, and is reported by SOLTMANN (Jahrb. f. Kinderhkde). A child while at play swallowed a head of what is known as foxgrass, which was followed by severe pain, difficulty in swallowing, and difficulty in respiration. In a few weeks the head of grass was

discharged in an abscess at the left vertebral column. In less than six months this case developed actinomycosis. The theory of ISRAEL regarding the case is that the parasite was carried by the piece of tooth directly into the lung. In the second case the fox-grass undoubtedly carried it directly into the mediastinum, which was followed by secondary involvement of the tissue of the lung.

DR. W. T. BELFIELD said: I would like to say in reference to DR. TILLEY's proposition, that experiments on the cultivation of transmission of this fungus ought to be made from fungi obtained from animals, and not from man; if from the latter, from pus taken from abscess cavities around the jaws. The reason is that fungi obtained in the sputum are more delicate in appearance and for preservation. I have found that after a few days they disappear, or at least are extremely hard to find, and it is stated by those who have had a great deal of experience, that the fungi obtained from the sputum are not so robust as those obtained from cattle or from pus cavities, aside from the air-passages, in man. In justice to DR. SCHIRMER, I would say that in the case reported by him, the fungus was recognized in the sputum and a diagnosis of lung actinomycosis was made.

DR. R. TILLEY said: the question with me was not that of producing the best possible sample of the fungus, but to place cases in question beyond dispute, and give the society further opportunities of studying the question. Necessarily American physicians must be ignorant of the question as a whole, because it is impossible to get that accurate information from literature that we can get from the study of the manifestations of the disease. I would not discriminate between this case and that of DR. SCHIRMER; on the contrary, if there is a probability of developing the fungus from pus, and an animal is chosen, I do not think there would be any objection to take samples from both cases to inoculate the same animal.

DR. A. J. OCHSNER, in closing the discussion, said, as far as we know at present, there is no evidence of the existence of actinomycosis in any other portion of the body; the probable reason of this is the fact that the patient has been exceedingly careful never to swallow any of the discharge from the abscess or any of the sputum. The accumulation of the fungus in the lungs is probably not sufficient to account for ulceration to have taken place into any of the other organs. The amount of sputum during twenty-four hours is between one and two ounces, and some days there will be one or two of these accumulations of actinomyces of considerable size and a few very small points, and on some days it is impossible to demonstrate actinomycosis. On Saturday there were, I think, a dozen quite large accumulations and quite a number of small ones, so that judging from the number we find in the sputum, and from the physical signs, which are a decrease in the motion of the left side, mucous râles, and very slight dulness on the left side above the fifth rib, the accumulations are not very great, and we do not find any signs of the existence of actinomyces in any other organ, which answers also DR. SKEER's question concerning the condition of the lungs at present. Concerning the access to the tissue, the patient had teeth removed from the left side of the upper jaw a number of times, during which time he was constantly handling animals suffering from lumpy jaw, which is the same as actinomycosis in man, and constantly handling objects that came in contact with these animals. Another point of interest which might give us some light as to the possible introduction of actinomycosis in man is this: The patient tells me that on the farm whenever one animal has lumpy jaw, a number of animals are likely to have it soon after. This happens generally in the spring of the year, or late in the winter, when animals are likely to rub their necks on the fences. He thinks these animals with lumpy jaw rubbing their necks on the fences are likely to leave some of the actinomyces, and the healthy animals are likely to scratch their skin and break the hide, and in that way become infected. The plants are exceedingly small, and could with ease be introduced into the mouth and the cavities of the teeth, or into the jaw from which teeth had been extracted. DRS. ROSS and ROBINSON are treating the patient at present by means of the pneumatic cabinet, introducing into the lungs 1-1000 solution of bi-chloride of mercury. It seems that more of the actinomyces have been coughed up since this treatment began, but it has been of such short duration that nothing certain can yet be said.

The committee on Pathology reported through DR. W. T. BELFIELD, the examination of the case of actinomycosis hominis, presented to the society on September 6th. The patient is a man about twenty-five years old, emaciated and feeble. The lateral diameter of the neck is considerably increased by inflammatory thickening of the superficial cervical tissues, which are hard and unyielding; on either side of the neck is a ragged scar and small fistulous opening from which issues a slight serous discharge. The jaws could be separated to only a slight extent; but so far as could be determined, the mouth and throat presented nothing abnormal; no carious teeth were detected.

Dulness on percussion and broncho-vesicular breathing were found over the apex of either lung; on the left side in the supra-clavicular region and first intercostal space anteriorly; on the right side down to the third rib.

The patient coughs frequently, and occasionally raises considerable sputum. About an ounce of sputum was collected, from which slides were prepared, and several specimens of actinomycosis were detected.

September 28 an incision was made in the left side of the neck, giving exit to a small quantity of pus, containing actinomycetes. It was the opinion of DR. BELFIELD that this patient is the subject of actinomycosis.

DR. BELFIELD said that he had been informally requested by the President to examine the case presented by DR. OCHSNER, and had found the patient exactly as described. He thought there was no question about the genuineness of the specimens exhibited. The diagnosis rested altogether on the detection of the fungi in the sputum, because if that were absent, the physical signs might be due to some other cause, but he thought the physical signs in this case were caused by the fungi in the lungs.

On motion of DR. TILLY, fifty dollars was voted to DR. OCHSNER and two members of the society for the purpose of making a series of experiments with actinomycosis.

SANITARY CONVENTION AT BIG RAPIDS, MICHIGAN.

A sanitary convention, under the auspices of the State Board of Health, was held Nov. 18 and 19, 1886.

It was opened by an address of welcome by the mayor of the city, E. W. HUDNUTT. DR. JOHN AVERY, of Greenfield, Mich., President of the State Board of health, spoke in response to the address of welcome, and said that the object of the convention was not to benefit physicians, but the public. The members of the State Board of Health also wished to gain information, that they may better serve the people. REV. HENRY JOHNSON, President of the Convention, read an able address.

DR. JOHN P. STODDARD, of Muskegon read a paper on "Injuries of Every-day Drug-taking." He said the habit of taking drugs and nostrums was beyond comprehension. It partly came from mothers dosing babies with soothing syrup, hive syrup, paregoric, worm lozenges, etc. Druggists and proprietary medicine companies distributed flaming bills, chromos and free samples of nostrums from house to house. The prevention was to educate the people in the injurious effects of drugs. There should be less medicine taken, and only on the advice of a physician after a careful diagnosis. A doctor was not capable of prescribing for himself when ill, much less are the laity, who know nothing of the action of drugs.

DR. DAVID INGLIS, of Detroit, read a paper entitled "Alcohol: What Effect Has it as Food, Medicine, or Poison?" In closing his remarks on alcohol as a medicine, he said: I should like to produce the continually accumulating evidence of the positive harm caused by such indiscriminate use of all kinds of alcoholic drinks, bitters and tonics. I should like, even more carefully, to define the conditions in which alcohol ought to be used than I have here done. I have only time to urge that we ought, in all cases, to let alcoholic liquors be the last, and not the first, remedy; that we ought to give alcohol in definite and known doses, and only during such time as the drug is required, and to make it our business to see that its use it then suspended, just as we do in case of opium.

DR. J. L. BURKART, of Big Rapids, read a paper on "Water-supply of Big Rapids." The paper embodied the report of the committee appointed by the common council to investigate the matter of procuring a better article of water for that city, and contained much of special interest to the citizens of Big Rapids.

This was followed by a paper on "The Sanitary Needs of Big Rapids," by DR. L. S. GRISWOLD, which contained practical suggestions for the citizens of that city.

PROF. W. N. FERRIS, of the Big Rapids Industrial School, read a paper on "Hygiene of Schools." He said that he could not recall ever having visited a room regularly occupied by 40 or 50 pupils, that could be said to be properly ventilated. Dullness, nervousness, headache, colds, catarrh, and consumption are among the frequent effects of staying in such rooms. Under the influence of bad air, study is irksome, good-behavior difficult, and the playground a heaven. He dwelt upon the lack of ventilation in the Big Rapids schools; and said that the foul-air openings could be made several times larger with slight expense. Strange as it may seem, school patrons think very little about ventilation, and care less. Their sleeping and sitting rooms are without any intentional means of ventilation. Vitiated air is the most expensive commodity which man takes into his body; for in thousands of families the expenditure of money for a single year which sickness and loss of time occasion by inhaling poison, would defray the necessary expenses for properly ventilating a decently constructed house. In several of the school-rooms of this city, the air-space for each pupil does not exceed 200 cubic feet. We should construct rooms for lower grades very large, and use single desks. The speaker denounced the style of desks in use in one school-room in Big Rapids as "torture appliances."

COL. J. O. HUDNUTT, C. E., of Big Rapids, read a paper on "A System of Sewerage and Drainage for Big Rapids."

JUDGE M. BROWN, of Big Rapids, read a paper on "Public Health Laws." After referring to the health regulations of the ancients,

he said: As civilization has advanced, and the average of mankind has reached a higher condition upon the plane of intelligence, health laws have become more general and better enforced. It may be stated that the race of man has advanced mentally and physically in proportion as heed has been given to the laws for the promotion of health. A kind of intuition seems to pervade the human race, aside from and above all law, that it is necessary to care for the public health in order to be comfortable and happy, and to enjoy this life. This intuition has probably led to the enactment of health laws by persons and bodies having legislative authority. * * * Some offenses against the public health are punished by the common law—by fine and imprisonment—such as the selling of unwholesome provisions. When articles of food are sold for domestic purposes, the law implies a warranty that they are fit for such purposes. The Supreme Court of this State says that this rule is not only reasonable, but essential to public safety. He then discussed English sanitary work. He thought the laws of Michigan in regard to public health were good enough, but the way they are usually enforced is very bad. "Perhaps one of the greatest sources of sickness in our midst is the want of proper ventilation in buildings occupied as dwellings, public halls, and other public places where large assemblages of people convene. In this county, until a very recent date, at every term of the circuit court more or less people in attendance became sick. Court was held in a room entirely unfit for occupancy on account of not being properly ventilated. * * * * * I desire to call attention to the subject of prisons and jails in this part of the State. I don't know a jail within the ninth congressional district that is properly ventilated, and hardly one that is proper for a human being to remain in over night. This subject has been agitated and investigated by the State Board of Health and the State Board of Correction and Charities, and a great deal of valuable work has been done; but there is still very much to do."

Dr. Arthur Hazlewood, of Grand Rapids, a member of the State Board of Health, addressed the Convention on the subject of "What to Eat, When, and How," and Dr. R. J. Kirkland, also of Grand Rapids, read a paper on "Care of the Eyes."

"Surface Filth as a Medium of Disease" was the subject of a paper by Rev. Henry A. Wales, of Big Rapids. He said: "In 1876, Dr. Henry Bowditch, of Boston, made an estimate of the annual cost to the people of the United States because of unnecessary sickness, and placed the figures at $100,000,000. Later, one of our own physicians—who is with us today—revised these estimates, going more into detail, and he increased the amount to $300,000,000; a loss each year of over $10,000,000 to the people of Michigan. And this estimate leaves out of view the physical suffering, the mental pain and anguish, and the death of loved ones around our social circles." In regard to filth he said: "By surface filth, we mean anything of this disgusting nature that is thrown upon or is suffered to lie upon the surface of the ground around our habitations or places of business—garbage, or the refuse of vegetable or animal matter; dirty water of every description, from that in which food is cleansed to the dish-water and slops of a household; dirt swept from the floors of the home or shop; the contents of the wood-box or spittoons; the refuse of a wood-yard, hen-house or pig-pen; and the excrement of chambers and privies. Besides these there are sources of filth in musty rooms, woolen blankets, feather-beds, and the cellars under the house. Rubbish of any kind becomes filthy if allowed to stand; and dampness increases filth by causing fermentation and vegetable growth. * * * * A close inspection of all the premises of a habitation is continuously needed, that nothing which may cause filth shall be allowed to accumulate." Mr. Wales thought that the "grand march of the giant contagion begins in the surface filth and the vaults of the civilized privy;" and he thought that if the dry-earth system were universally introduced, it would exterminate such diseases as cholera, dysentery, and typhoid fever, as they are propagated solely by germs in the voided excrement.

Prof. W. S. Baker, Superintendent of Big Rapids Public Schools, discussed the paper by Prof. W. N. Ferris, on "School Hygiene," in which he dwelt largely on ventilation.

Prof. Henry F. Lyster, M. D., of Detroit, a member of the Michigan State Board of Health, read a paper for which no subject was announced. He said: "Nature cares absolutely nothing for individuals. It is the family, the species, the race that she cares for. When one of her laws has been contravened, it may not always be capital punishment, but it will always be punishment proportionate to the offence. She is implacable as long as the law is offended. She asks no reason; she demands no explanation. She simply requires obedience. The more we study and understand her laws, the more clearly appears a Divine will governing them: An offense against the moral law of our nature brings its punishment in the deterioration of our moral nature just so long as it continues. * * * * If you should go through the wards of St. Mary's or Harper's hospitals, you would see lying upon one of the beds a poor, wan consumptive, with a dash of too much brilliancy in his eyes, too long eyelashes, too delicately a chiseled nose, too bright a crimson spot upon the cheeks, too hot and pungent a feeling to the long, thin hands. It

may be from no fault or error of his own that he lies there. He is bearing the punishment to which nature, in her own unerring judgment has set her seal. In this ward you might see a young man old before his time, whose uncertain, shuffling gait and feeble form have placed him physiologically, among the octogenarians, and whose waning intellectual power and dull, sluggish brain fail to respond to any emotion of either joy or sorrow. Here is the victim of dissipation and intemperance. Nature is punishing him. The laws which he infringed years ago are unsatisfied. He has wrecked his own life, and who knows what other lives? He passed his Rubicon in early manhood. He will make his final ferryage before he should have reached the youth of his strength. There is a beautiful little girl. Some deformity of the spine has been her lot. * * * * She is suffering from the sins of her forefathers. Thus we see, on all sides, the victims of the infringement of natural laws. * * * * While the germs and species will be preserved in nature, what can be done to save the individual and enable him to attain his highest degree of perfection, physically and morally? It is here that a distinct science is applied, known as sanitary science. The discoveries in this science are nothing more than translation and application of natural laws of the preservation of health and the prolongation of life. * * * A young man is in no way responsible for his inheritances, but sanitary science can teach him much that will profit him, and can do much to protect him. Suppose that his father had died at 30 of consumption, and that his mother at 40 was in feeble health, very nervous and a victim of various neuralgias, and came from a comparatively short-lived family. Sanitary science would say to this young man, choose your occupation from among those which will enable you to be in the open air a large portion of the time; where exercise would insure good sleep at night; where good digestion waits on appetite, and health on both. He should prefer the saddle to the office desk, the broad fields of the farm and smell of newmown hay to the narrow streets and the lowering clouds of smoke and dust that hang over the crowded city. He should turn his back upon the tempting offer of a clerkship in an insurance office, or store, and herd sheep in New Mexico, cattle in Montana, or manufacture lumber in Northern Michigan, or farm it in Washtenaw or Oakland county. Let him do anything under the sun rather than inure himself in the shadow of indoor life. Sanitary science comes to the aid of this young man in all of his environments. * * * * The maintainence of parks and boulevards, libraries, open-air concerts, an elevating press and free schools, are all powerful sanitary agents."

DR. JNO. AVERY, of Greenville, President of the State Board of Health, read a paper on the subject of "Pasteur and Protective Medicine." DR. AVERY told of PASTEUR'S parentage, his boyhood, his studies, and his first triumph as a chemist in discovering the left-handed polarizing tartaric acid. PASTEUR, after this mark, was made assistant professor of chemistry at Strasburg, where his first work was to prove the power of minute organisms to change or modify chemical affinity. He was then made dean of the faculty of sciences at Lille. Here he determined to devote a portion of his lectures to the study of fermentation. The prevailing theory of fermentation at this time, PASTEUR could not accept. He experimented with milk, and discovered the lactic ferment. And soon after, in the same substance or some of its products, he found the butyric ferment. These two organisms he found to be entirely distinct. The lactic ferment required for its existence and multiplication, free oxygen or air; while the butyric ferment died when exposed to the atmosphere. PASTEUR soon demonstrated that the special fermentation known as putrefaction is caused by a living organism belonging to the same class as the butyric ferment; and he also soon discovered the active acid ferment — the "*mycoderma aceti*." PASTEUR'S next work was to demonstrate that spontaneous generation was a myth; and he then discovered the germ which caused so much havoc among silk-worms of France and other countries. He demonstrated that the disease among the silk-worms was contagious, and gave practical directions for its prevention which restored the silk industry to Europe. This work led him to the great work of his life —the development of the theory of the parasitic origin of communicable diseases; and in this effort he took up the disease known as anthrax or splenic fever, which was decimating the flocks of all Europe. "He put a drop of splenic fever blood into sterilized yeast-water; in a few hours it swarmed with myriads of bacteria. A drop of the first cultivation he put into a second flask containing the same kind of liquid, and the bacteria multiplied as before. This process he repeated 15 or 20 times, and by this means freed the initial drop of blood from any substance it might have carried with it. And now, if a drop of this last cultivation is injected under the skin of a rabbit or a sheep, the animal dies with all the symptoms of idiopathic splenic fever. "PASTEUR had studied vaccination, and he now undertook to vaccinate for protection of animals against splenic fever. "Before the close of the year 1881, PASTEUR had vaccinated 33,946 animals. In 1882, the number amounted to 399,102, including 47,000 oxen and 2,000 horses. In 1883, 100,000 were added to the list. In 1881, it was the common practice of farmers to vaccinate one-half of their herds and leave the other half

unprotected. It was found at the close of the year, that the loss in the protected sheep was ten times less than in the unprotected, being one in 740 as against 1 in 78. In cows and oxen it was 14 times less. * * * * "In pursuing his investigations of the splenic fever disease, PASTEUR made some curious and interesting discoveries which are of practical value to sanitarians and all who are interested in preventing the spread of communicable diseases. * * * * * He found that an attenuated virus that could cause no harm to a guinea pig of a year or a month or even a week old, would kill one just born. The weakened microbe could multiply itself in the blood of one so young; and a few drops of this pig's blood would kill one still older, and so on until the full virulence of the microbe was restored. * * * * Exposed to the air, these germs become weakened or take on the form of spores, in which condition they will remain viable for years, and float in the air as minute particles of dust, until they find lodgment in the proper media for their development and multiplication. What is true of these germs, may also be true of the germs of diphtheria, scarlet fever, small-pox, typhoid fever, and other communicable diseases. In localities where these have prevailed as epidemics, is it not quite possible that their attenuated and viable germs are constantly floating in the air, ready to resume their active form whenever and wherever the conditions of climate, of poverty, of wretchedness, of filth, and of bad air, present themselves?" DR. AVERY closed his paper with a discussion of PASTEUR'S work in inoculating for hydrophobia.

The last paper of the convention was on "Prevention of Communicable diseases," by DR. F. GUNDRUM, of Ionia.

Sets of the pamphlets issued by the State Board of Health, giving detailed methods for the restriction and prevention of each of the dangerous communicable diseases, were distributed in the audience.

RED RIVER FEVER.

BY J. E. ENGSTAD, M. D., GRAND FORKS, DAKOTA.

In all western and recently-settled country there is a prevalence of fever. In the months of August, September and October it generally roams over the valley with great severity, while there are occasional cases the rest of the year.

The cause of the epidemic, if I may call it so, can be found in divers conditions, as hastily-constructed houses, scanty and badly-prepared food, and exposure to a severe climate, but the chief cause is in the water-supply.

All the Red River valley is a perfectly level plain, drained by Red River, which flows due north to Hudson Bay, where perpetual ice and snow cover the land and water.

The soil is not very well drained, and a great amount of "alkali" is left, giving most of the water a salty taste. Some small streams are so impregnated with alkali that it would be dangerous to drink even a small cupfull.

The water has first a cathartic action, followed by a chronic constipation; consequently, we have a great number of cases of chronic intestinal troubles.

In fever those conditions modify, or, to a certain extent, change the course and symptoms of the disturbance.

In nearly fifty tabulated cases of typhoid fever, all except two were more or less constipated through the whole course of the disease. In one of the cases where constipation was absent, the characteristic pea-soup excreta were observed, while the other had been treated for dropsy, where there was gaseous distension of the abdomen.

The general constipation in nearly all the cases, aside from the epidemic tendency, so impressed the earlier practitioners, that they thought they wrestled with a new climatic disease, and so gave it the name of Red River fever.

Why the intestinal ulceration which is present does not develop a diarrhœa I do not know. In one case I observed, post mortem, perfect typhoid ulceration.

The fever lasts from ten to thirty days, and develops all the general symptoms of typhoid fever, with the one exception, nearly always constipation. The temperature ranges from 103° to 105½°. For the reduction of the high temperature I use sponging. I never give quinine or antipyrine except when they are plainly indicated.

That it is a new disease is an absurdity. It is only typhoid fever modified by local influence. The mortality, as near as my observation goes, is 8 or 10 per cent. By disturbing the alimentary canal and the general symptoms by quinine, I think the mortality would be higher.

The Norwegians seem to be more prone to the disease than the Americans; probably due to change of diet and habits.

It was long, and is, probably, still supposed that this country has a monopoly in the bogus diploma business. The Medizinal Zeitung reports the case of an enterprising German who advertises diplomas at fair prices. He agrees for the consideration of 500 marks, to furnish the degree of doctor of philosophy, law, medicine or chemistry, stipulating that the applicant need not bother himself with study, or attendance at lectures, to secure it.

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Editorial.

LITHÆMIA.

In a paper on this subject in the Northwestern Lancet Dr. E. A. Holmes calls attention to certain facts which we have for some time had in view, more particularly in the treatment of a peculiarly persistent form of headache accompanied by "hot-eye," of which two cases have come under observation during the past year, and which promptly yielded to the remedies suggested by the supposed cause of the affection. This cause was held to be gouty in its nature. Touching the condition of the system which obtains in these causes we quote Dr. Holmes:

"Lithæmia is a representative term of a condition of the system, rather than of a localized disease whose pathological anatomy we have accurately determined. It is a condition of the system in which an excess of uric acid or urates may be found in the blood, whether it be by over-production or deficient elimination. A condition in which the resultant symptoms are often complex and misleading, and is the open door through which enter, in an ungarded moment, such unwelcome guests as gout, rheumatism, diabetes, and certain structural changes in the bloodvessels and kidneys, any one or all of which, no doubt, may bear to the lithæmic condition the relation of cause and effect.

"I am aware that in taking this ground, scientific medicine does not as yet fully bear me out; but upon this some of the best men of the profession at the present time have taken a stand, as evinced by the discussion upon this subject at the recent meeting of the Association of American Physicians. I think it is now generally conceded that the antecedents of uric acid are the same as those of urea, the former is the result of an incomplete metamorphosis of albuminoid substances, the latter the ultimate product, ready for excretion. This statement is of course based upon the theory that digestion is a chemical process, in which the albuminoid substances are eventually eliminated as urea, the metamorphosis when complete being an oxidation. Recent investigations have proven, almost beyond a doubt, that the liver is the organ in which an important part of this complete chemical process takes place. This being true, it follows that any derangements of this organ making its physiological action incomplete in regard to proteids, may give rise to the lithæmic condition. From our present knowledge of the glycogenic function of the liver, and the extent to which it may be modified not only by certain cellular structural changes, but by and through the influence of certain nerve centeres, we are led to infer that equal or even greater changes may be wrought in regard to the hepatic function of urea formation; knowing the many derangements to which the liver is subjected, it is not unreasonable to suppose that this particular function may often be disturbed, suboxidation of the proteids occur, and as a result an abnormal quantity of uric acid be found circulating with the blood, developing the lithæmic condition. Hence, disturbances in digestion, an excess of albuminoid matters beyond the power of the system to properly care for them, and certain abnormal conditions of the blood, are causes producing this condition, as well as changes which may be brought about through the influence of certain nerve centres upon the circulation and cell action of the liver."

Dr. Holmes' treatment of this condition corresponds so closely with that which we have pursued, and is so clearly suggested by his views of the pathology of the condition described that we reproduce it:

The indications for treatment are:

1st. To regulate the diet, making it plain and simple, diminishing the albuminoid substances as well as all known articles of food which the patient himself is aware he cannot digest well, directing him to eat sparingly of sugars, starches and fats, to avoid highly seasoned food and all liquors, as well as tea and coffee, especially the latter.

2d. Use those means known to all for the purpose of promoting digestion.

3d. Seek to remove as far as possible any abnormal conditions of the organs concerned in digestion, and I would especially call attention to what is termed gastro-duodenal catarrh. Each of you, no doubt, have your favorite remedies for correcting this difficulty, but I trust will pardon me if I say here, that few combinations give me better results in these cases than that recommended by Dr. N. S. Davis, and composed of:

℞ Acidi carbolici, gr. viii.
Tr. gelsemii,
Glycerinæ, ää ʒ ss.
Tr. opii camph.,
Aquæ, ää ʒ ij.

Misce et Signa: A teaspoonful 15 or 20 minutes before each meal.

4th. Indication may be named in one word —"Eliminate."

5th. Finally, but not of less importance is it to endeavor to prevent directly, as soon as possible, the suboxidation, whereby certain elements become uric acid instead of urea, the latter being the normal excretory product. This may be done by making inert or readily excreted combinations with the antecedents of uric acid. BARTHOLOW recommends dilute nitric acid taken in five to ten minim doses before meals, as fulfilling in a measure many of these indications. In my own very limited experience I have found nothing acting more satisfactorily than salicylic acid combined with some alkali, and as the potash salts, in their combinations with uric acid or its antecedents form soluble compounds, while the sodium salts in their combinations form insoluble compounds, I much prefer the former. In fact a favorite prescription of mine in these cases, and one which I consider covers most of the indications in an uncomplicated case (except the regulation of the diet) is:

℞ Acidi salicylici, ʒ iv.
Potassii bicarbonatis, ʒ vi.
Glycerini,
Vini colchici, ää ʒ iss.
Aq. cinnamonum, ad. ʒ vi.

Misce et Signa: A teaspoonful in water every four hours.

In this prescription there is an excess of the potash salt necessary for combination with the salicylic acid, which I consider an advantage, as furnishing some free alkali with each dose.

In conclusion I beg to offer the following summary:

Lithæmia is a condition arising from an incomplete physiological chemical process, in connection with the metamorphosis of albuminoid substances.

The uric or lithic acid is supposed to be an intermediate product in the formation of urea for excretion.

The organ at fault in this defective chemical process is the liver.

Derangements of the digestive organs, or of the nervous system, or any cause which may produce such derangements may indirectly lead to the disturbance of this hepatic function, and the production of the lithæmic condition.

This condition is often unrecognized and its symptoms ascribed to other causes.

Its greatest importance consists in a tendency to secondary maladies of grave character, such as gout, diabetes, rheumatism, rheumatoid arthritis, Bright's disease, etc. Viewed from this standpoint these diseases may be considered local manifestations of a constitutional disease, like the throat in diphtheria, or the skin in variolæ.

The correlation of the above-mentioned diseases is not an established scientific fact as yet, but there are good grounds for thinking that they have a common cause.

The lithæmic condition is amenable to treatment.

It often complicates or is the cause of puerperal diseases.

After all, in considering this condition as the exciting cause or primary malady of the abovementioned diseases, it is plain enough we have not yet determined the ultimate source of the *materies morbi*, as the lithæmic condition itself is but a symptom of a perverted or incomplete physiological function, the exact nature of which has not yet been fully determined. It seems now more than probable that we must look for the ultimate cause in the metabolic action of the liver cells, and the influence of certain nerve centres, in controlling and modifying this action.

CONDURANGO WINE IN DISEASES OF THE STOMACH.

Condurango, which erstwhile created something of a furore in this country because of the claims of virtue in cancer which accompanied its introduction, has apparently not fallen into the innocuous desuetude in Europe into which it was suffered to lapse here. Of late years occasionally rather flattering reports of its use have appeared in foreign periodicals, and it may yet turn out that the circumstances attending its introduction in this country gave the drug a very unmerited black eye. The latest notice which we have seen of it appears in the Berliner Klinische Wochenschrift, from the pen of DR. WILHELMY, of Berlin. This writer was induced to employ the drug through the representations of a no less experienced and distinguished clinician than FRIEDRIECH. Although errors of diagnosis may have been possible, or had actually occurred, in cases of reported cures of cancer of the stomach, the fact remains that the affection, whatever it may have been, was relieved, and the potency of the drug for good thus established.

WILHELMY'S first experiments were made with decoctions of condurango, but he soon dropped these, because the patients could not take them for any length of time on account of the disagreeable taste. The stability of the decoction is also limited, so that only small quantities could be prepared at one time, thus making the treatment tedious and expensive. He, therefore, ordered a condurango wine, made from good madeira wine and containing the extractive of ten per cent. of genuine bark

from Equador. This was prepared by means of simple maceration.

He also had this wine prepared with a two-per-cent. addition of citrate of iron, and the use of this ferrated wine was attended with best success in cases in which it was indicated.

Of cancer of the stomach only six cases came under WILHELMY'S care during the last five years; of cancer of the œsophagus, only one. Though the number of cases on which to base an opinion is thus rather small, the results of his observations encourage further trial of the drug. Under its use the pains became materially reduced after the patients had taken it for one or two weeks, four times a day, in doses of two tablespoonfuls of the wine, without iron. The appetite improved, the painful vomiting, especially, decreased materially, and, in the cases of two men and one woman in whom the carcinoma was located at the pylorus, an increase in weight was readily demonstrable by weighing. Though all these patients with the exception of one, died, the conclusion is nevertheless unavoidable that the remedy afforded them material relief during the last months of their lives.

HOFFMAN, of Basel, has witnessed similar encouraging results in a much larger number of cases of cancer of the stomach, from the use of a very similar preparation. The cases of carcinoma of the pylorus seem to prove that a longer moistening of the surface of the cancer with the medicine is of advantage, and that, consequently, it is well not to administer too small quantities of the wine at one time, but to introduce from one to three tablespoonfuls into the stomach.

Very much more decided, and often almost brilliant, results have been effected in the treatment of ulceration of the stomach with ferrated condurango, the effects of which have been most striking in cases in which anæmia might reasonably have been regarded as an element in the causation of the disease.

The treatment of ulceration of the stomach embraces 27 cases, counting, however, only those in which either through hæmatemesis, bloody stools, or a fixed circumscribed pain in the region of the stomach, the diagnosis was established beyond a doubt. In pronounced cases, and without respect as to whether there is any bleeding or not, a tablespoonful of ferrated wine of condurango was given six times a day. The pain and bleeding usually subsides in three to four days. Morphine and the ice-bag were employed only in quite exceptionally serious cases. The diet was, of course, carefully attended to, the same as would be the case in any other treatment of the disease. The patients, who in many cases were servant girls, were enabled in from eight to ten days to resume their occupation, although the use of the wine was continued for a couple of months. Relapses, it is true, occurred in the patients thus treated, but they were of a mild kind and of short duration, because in these cases the treatment was resumed at a very early period.

Similar to the above cases of ulceration of the stomach, were the results in the treatment of anæmia. The combination is one which facilitates the exhibition of iron.

This wine was also used with good success in a number of primary and chronic cases of catarrh of the stomach, and the author urges the use of the wine in the anorexia of phthisis.

PHYSICIANS' FEES.

The question of the method best calculated to secure to physicians a proper recompense for their services, is one which is pressing closer and closer for a solution, year by year, as the proportion between the honest and capable public and medical practitioner grows greater. It has been said of old that the laborer is worthy of his hire, and in all the other avocations of life the laws have been so framed that the man who earns his salary or his wages is almost certain of collecting them. In the practice of medicine, however, the financial rewards are becoming more and more uncertain. The first duty of the physician is to answer the cry of humanity, and comparatively few have developed that peculiar property of the heart which enables them to make certain of their fee before rendering the service. While to do this may be quite justifiable in exceptional cases, to make it the rule would be to not only work incalculable injury to worthy sufferers, but also to take from the physician's calling one of its chiefest charms. The physician must continue to be a physician first and a business man afterward. But while this is so, it behooves him still not to neglect the business features of his calling, and we believe the time is not distant when other matters than sarcomata, micrococci and peculiarities in the histories of cases, will engage the attention of medical societies. The legal profession have not thought it *infra dig.* to give the necesary attention to the matter of the collection of their fees, and, as a consequence, the laws are such that the lawyer who fails to secure both his retainer and full compensation for all subsequent service rendered his client is a *rara avis* indeed. One of the troubles with medical men is that they are too much devoted to the purely professional division of their calling, and thus neglect a division which is to them personally of scarcely secondary, if not, indeed, of primary importance. There is absolutely no protection to the physician in the matter of his fees, in the vast majority of instances. The clerk, mechanic or laborer need not work for the employer who is slow of pay, but should he elect to work for such, the law, in some States at

least, secures him his wages before any other debt is paid; the merchant may refuse to deliver the goods to a party of whose solvency he may be in doubt; and the lawyer, as already intimated, stands in no danger of spending himself in the interests of a client without compensation. With the physician, however, there is no special manner of avoiding imposition. It is true, he may by an action at law recover in cases where a debtor is not execution proof; but, unfortunately, the bulk of the practice of the majority of practitioners, is among those who are enabled by the law to escape the payment of their debts. As a consequence, the debt owed a physician has come to be very largely a mere debt of honor, and the experience of many is corroborative of the suspicion that honor in this particular direction is getting to be a somewhat scarce commodity in the market.

There is annually rendered by every competent practitioner sufficient service, which, if properly remunerated, would secure to each an ample income. The percentage of losses incurred by the profession would bankrupt any mercantile firm, and create a stagnation of the commercial interests of the country. This fact has long been recognized, but the competition has not been sufficiently great to make it absolutely necessary to take action looking towards its correction. But the necessity is yearly coming nearer, and the time is not distant when local, state and national associations will be compelled to give the matter attention. This compulsion will come, if in no other way, through the consideration of infractions of the code of ethics, of which the younger members of the profession will be found guilty in their struggle for existence during the first decade of their professional life. It is becoming, and has, indeed, become a very difficult thing for a young physician without money, family or social connections, to keep afloat with the restrictions of the code of ethics dragging at his heels. A very decided change in the methods of doing business has taken place during the past quarter of a century, and the business world has accommodated itself thereto. In the business division of the physician's calling, however, no change has been permitted, and that which a business man is permitted, and finds it necessary to do, to keep his head above water, the physician can do only under the penalty of ostracism from his profession.

We should be pleased to receive from our readers any suggestions which may have been aroused by the above remarks, and we shall attempt to pursue the matter further in future issues.

Now is an excellent time for readers to renew their subscriptions for 1887. Do it early and avoid the rush.

Notes.

HERY WARD BEECHER, on his return from abroad, gives the following resumé of the remedies recommended to him for sea-sickness, to which he is peculiarly prone:

Go on board with a full stomach of plain but nourishing food; do not have anything on your stomach when you embark.

Keep on deck. Do not go out of your state-room, but lie quietly on your back.

Take champagne or claret, or brandy, or whiskey, or gruel, or oat-meal porridge, or bits of salt codfish scorched upon living coals.

Then have an iceberg along your spine; a light belt should be worn below the waist; use homœopathic remedies freely; it makes little difference of what kind; blue pills and Congress water are as good as anything.

As a result of his experience, however, he pins his faith to the following:

But the best of all things is to kick the doctor out of your state-room, lie still in your berth and wait for land. This is a sure cure.

There are many alleviations of this condition —the smell of bilge water, if on ship; the smell of grease, if on a steamer; the smell of dinner, if your state-room opens on the dining-saloon; the rattle of knives and the jolly roar of merry men at their abhorrent meals. For variety, a friend visits you and narrates his experience and recommends new torments.

MR. BILL NYE has been making a sort of a trial essay in the field of medical biography. The following is his synopsis of the chief events in the life of BRIGHT, of Bright's disease fame. MR. NYE is evidently slightly mixed as to the identity of this particular BRIGHT, for he calls him John, thinking, doubtless, that the physician and the statesman are one and the same individual: "JOHN BRIGHT was born in 1811. He made a tour of the holy land at the age of 24, but did not decide to purchase it, owing to the existence of a flaw in the title. On his return from the Orient, he discovered that what was most needed in Europe and America was a good reliable disease for the use of the better classes. The poor and humble were well supplied, but the rich, the aristocratic and patrician statesmen, corned heads and porkists of the two lands languished for a good reliable disease that poor people could not obtain. So he began to sit up nights and perfect Bright's disease. He gained the prize at the Paris Exposition, and honorable mention at the great Central celebration at Philadelphia 'for a meritorius and effective disease for the better classes.' Since that time he has been gratified to notice that the very best people, both in his own land and in this, are handling

Bright's disease. It has been kept out of the reach of the poor, and to die from this ailment has been regarded as a proud distinction."

For the edification of Daniel's Texas Medical Journal we would state that in this latitude a bald head and bay-window are not the distinctive evidences of true virility, and that these are not essential qualifications of the gynecologist here. By "virility" we mean manhood or manly character. The word, of course, also means "the power of procreation," but "the defender of the mothers of Texas" ought to be among the last to even intimate the possibility of this salacious definition of it in the connection in which we employed it. We still insist that a bald head and a bay window are not necessary qualifications for a popular gynecologist, and we do not feel called upon to apologize for saying that "true femininity is in close sympathy with true virility."

There has been a little unusual activity in Detroit medical circles of late. DR. E. W. JENKS has established a private hospital for the care of patients coming under his specialty of diseases of women, and several physicians have organized as a body corporate for the conduct of a Polyclinic. DR. JENKS' venture is not a new one with him, but it is, in reality, the transfer of the institution so successfully conducted by him near Chicago, prior to his return to this city. The Polyclinic, also, is properly the successor to the West End Dispensary, which was reorganized in order to incorporate certain features which it is the intention to fully develop, and which could not conveniently be conducted under the former organization.

DR. D. G. BRINTON, of the Medical and Surgical Reporter, has, besides devoting himself to medical literature with sufficient assiduity to make for himself a name therein, been for many years such a student of the languages of the American aborigines as to have become noted also in this distinction. In recognition of his ability in the latter capacity, he has been elected Professor of American Archeology and Linguistics in the University of Pennsylvania.

The American dentist is all the rage abroad, and in England, according to a London correspondent, he is quite as much an established institution as the French hair-dresser or the German waiter. Dentistry is, in fact, the only thing in which the English will acknowledge American superiority.

Let us have suggestions of means whereby the medical profession may be able to place itself on an equal footing with the other callings of life, in the matter of securing its merited pecuniary awards.

Book Notices.

OUTLINES OF THE PATHOLOGY AND TREATMENT OF SYPHILIS and Allied Venereal Diseases. By Hermann von Zeissl, M. D., Late Professor in the Imperial Royal University of Vienna. Second Edition. Revised by Maximilian von Zeissl, M. D., Privat-Docent for Diseases of the Skin and Syphilis, at the Imperial Royal University of Vienna. Authorized Edition, Translated, with Notes, by H. Raphael, M. D., Attending Physician for Diseases of Genito-Urinary Organs and Syphilis, Bellevue Hospital, Out-Patient Department, etc.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

The literature of this subject is so voluminous that the publisher who issues another work thereon should have some special reason for so doing. The reason in the present instance exists in the fact that the author has devoted his entire life to the study of the disease, and has treated upwards of thirty thousand cases. To have suffered the record of an experience like this to die with him would have been a crime against his profession. This record has here been preserved in very readable form, and nothing more than a very superficial examination of it is necessary to convince one both of its value and of the force and individuality of its author. Touching the prognosis of gonorrhœa in the male, for instance, he declares that to foretell the duration and course of the disease is a difficult problem. Experience has only taught us this, that when a mucous gonorrhœa has retained this character for several days after exposure to infection, it will, under an appropriate treatment, disappear sooner than a purulent gonorrhœa, and that the presumption of a speedy cure becomes almost a certainty, when the female who communicated the disease suffers only from a mucous catarrh of the genital organs, or when the disease in the man can be ascribed to the temporary irritative influence of the menstrual flow in the woman. The possibility of infection without the intervention of the specific gonococcus is here clearly indicated, and the remarks on the curability of the affection should be borne in mind in attaching to any particular drug its value as a curative agent. The whole chapter on the disease is full of practical points.

A remark under the head of syphilitic eruptions will strike most readers as strange: "Although psoriasis palmaris and plantaris often obstinately resist all kinds of treatment, nevertheless it is a good omen for the patient, and we are relieved of the apprehension that dangerous purulent infiltration of some delicate organs, or that exudation under the peritoneum, etc., was impending."

A comprehensive review of this attractive treatise is impossible within the limits of our space, but, perhaps, enough has been said to indicate its nature, and enough has been in-

tended to induce those interested in the subject to possess themselves of the work for a careful perusal. The translator has performed his part with apparent fidelity, although there are a number of, perhaps, not very avoidable stiffnesses.

THE MEDICAL NEWS VISITING LIST FOR 1887.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

The enterprising publishers of this very excellent List have taken time by the forelock and are first in the field with their book. Those who have used this list during the past year will require no words of ours to induce them to continue in its use, and a statement of this fact will, probably, induce others to examine it before investing in a list for the coming year. We presume the publishers will be quite willing to take their chances in such a contest with the other lists on the market, and without any desire to discriminate we think they would be quite safe in encouraging such a contest. This list is gotten up in a superior style of workmanship and contains besides the list proper the usual notes on Examination of Urine, the Metric System, Rules for converting degrees of the Centigrade Scale into those of Fahrenheit and *vice versa*, Comparative Scales showing the equivalent of ordinary Weights and Measures in those of the Meteric System and *vice versa*, Disinfectants, Artificial Respiration, Poisons and their Antidotes, Ligation of Arteries, Table of Doses, etc.

Medical Progress.

A NOTE ON THE PRODUCTION OF CATHARSIS BY MEANS OF HYPODERMIC MEDICATION.—It is often necessary to produce catharsis with the least possible loss of time. It is also frequently the case that cathartics cannot be administered *per os*, and that injections per rectum will not accomplish our purpose. In such emergencies, it has been our habit to rely upon croton oil, dropped upon and absorbed by the tongue; but experience will bear us out when we say that croton oil is not always reliable. How, then, are we to attain our object certainly, expeditiously, and safely? We must seek our reply in an appeal to the hypodermatic syringe, and that class of drugs which produce catharsis by their absorption into the circulation, and subsequent action through the nervous system. The list of the latter is of goodly length. We have already employed not a few of them upon the lower animals, and with gratifying results. We are not prepared to assert positively that we have found an agent which, when used hypodermically, will invariably produce catharsis expeditiously and safely, but we believe that further observation—leading to a better knowledge of solubility and dosage—will establish this claim for two or more of the substances with which we have lately been working.

We present herewith the results of some observations upon cathartic acid, podophyllotoxin, and elaterin.

Cathartic acid was first isolated from senna by DRAGENDORFF and KUBLY, in 1866, and described by them to be a glucoside, of weak, acid character, having formula $C_{180}H_{192}N_4O_{82}S$. Cathartin was isolated and described by LASSAIGNE and FENEULLE, who considered it the active, purgative principle of senna; but it was afterward found to be a mixture having little, if any, purgative properties, and it is now generally admitted that cathartic acid is the active principle of the plant. Cathartic acid has a brown color while moist, and is nearly black when dry. It is an amorphous substance, nearly insoluble in water, and insoluble in ether and alcohol, but readily combines with the alkalies and earths, forming salts soluble in water, which are decomposed by acids with precipitation of the cathartic acid. It may be purified by dialysis, as it has strong colloidal properties.

The cathartic used in these experiments was that found in the market, prepared by H. TROMMSDORFF. It was of a dark-brown color, having an odor and taste resembling licorice. It was completely soluble in water, forming a wine-red colored solution. From its chemical and physical properties, we are convinced that the preparation was by no means pure, and the results here given are only of value so far as the commercial acid is concerned. We are now preparing the pure cathartic acid, and will soon be able to present data obtained by its use. The difficulty in obtaining, in the pure state, drugs which are little used, is recognized by every experimenter.

We have used cathartic acid four times upon young kittens. In the first two experiments we injected one-third of a grain and one-half of a grain, respectively. These kittens were in a poor physical condition when they came to us. The injections made into the subcutaneous tissue of the belly caused no discoverable local irritation. The kittens died in about two days, no catharsis having been produced; but upon post-mortem examination, the small intestines were empty and slightly injected, and the colon enormously distended with impacted feces. In the third experiment we employed one grain of the acid without local irritation or the production of catharsis. In the fourth observation two grains of the acid were used, and in ten hours free catharsis came on. The stools were at first hard; later, soft and clay colored. This effect continued for several days.

In two instances we used the cathartate of ammonium—giving one grain of the salt. One of the kittens experimented upon died in about 13 hours, and, in the case of the other two, the stomach and intestines were found empty and somewhat injected, and the large intestine distended with impacted feces. Free catharsis was induced in the other kitten in about four hours.

We propose now, from a chemically pure cathartic acid, to make a cathartate of purity and known composition, and on the basis of our former observations, soon to determine the cathartic dose for man.

Podophyllotoxin. — D. V. PODOWISSOTSKY (Pharm. Zeitschrift für Russland, 1882, Vol. xx. p. 777) found, after careful examination, the root and resin of podophyllum to contain podo-

phyllotoxin as the active purgative principle. This body he described as being composed of a resin acid, picropodophyllic acid, and a neutral crystalline principle which he called picropodophyllin. Podophyllotoxin, when pure, is described as a bitter, white, resinous powder, soluble in weak alcohol and hot water, while that of commerce is a light-yellow powder. It is precipitated from its alcoholic solution by water in large quantity. The slight color of commercial article is probably due to the coloring matter which has been imperfectly separated.

BRUNTON states that the resin of podophyllum "acts on the bowels when injected subcutaneously, as well as when introduced into the intestinal canal." In 1880, DR. D. O. BRAU reported that he had used podophyllotoxin as a purgative for children and found it completely to represent podophyllin. To a child 13 years old he gave from $\frac{6}{100}$ to $\frac{9}{100}$ of a grain.

We have used podophyllotoxin upon kittens three times, producing free catharsis in each case within an hour. In two of the experiments catharsis was carried to the extent of bloody, mucous passages, the bowels remaining loose for several days. In these cases there was no depression of any kind manifest until after many watery stools had been voided, when the cats betrayed the weakening effect of this drain of albuminous fluid. In one case the catharsis was promptly checked by the administration of $\frac{1}{16}$ of a grain of morphine. We have also used podophyllotoxin upon man four times—two of the cases being in the Cincinnati Hospital.

I will quote the notes of the resident physicians making the observations.

DR. NICEHELSER reports:

April 26. A. P., æt. 58. Chronic rheumatism. Bowels were usually irregular. Has now had a constipation of five days' standing. In the morning complained of pain in abdomen. Ordered tinct. opium, gtt. x. Pain relieved. At 3:45 p. m., was given gr. $\frac{1}{10}$ podophyllotoxin in a fifty-per-cent. alcoholic solution hypodermatically. Hourly observations were made of pulse and temperature. Neither of these was in any way affected. Nine hours after the injection, at 12:45 a. m , he had one hard moulded stool, and at 5 a. m. another stool, soft in character. Thereafter his bowels continued regular until May 4, when he was discharged from the house. There was some local irritation at the point of injection, but it was inconsiderable in amount.

MR. MUSSEY reports:

April 30. O. M., colored, æt. 21. Syphilis of nine months' duration. Now has several abscesses on neck, and an antero-posterior curvature of the spine. Patient's bowels have been constipated and it has always been necessary to give a cathartic to bring about a movement, the one usually employed being epsom salts ℥ ss. States to-day that he has had no stool for two weeks.

8:40 a. m. Gave ♏xx podophyllotoxin in solution fifty-per-cent. alcohol, equalling gr. $\frac{1}{16}$ of the drug, hypodermatically. Pulse 84, temperature normal.

9:40. No stool, pulse 84, strong and full. Temperature not taken.

1:40 p. m. No stool, nor has patient had any inclination in that direction. Pulse 72, good and full. Some swelling, redness, and tenderness at point of injection.

At some time during the early morning of May 1, patient had a large stool and during the day had another. No pain accompanied either movement. Questioning brought to light the fact that the night before the podophyllotoxin was given, the nurse had, without orders, given a dose of salts, which had produced a small stool that very morning. For some days after administration of drug, bowels moved without any trouble. Patient had, at the time the podophyllotoxin was given, complete paralysis of motion and sensation of lower limbs.

The doses used in these cases were those recommended by DR. BRAU for children of 13 years of age.

In view of the smallness of the dose, therefore, the results may be held to be satisfactory, especially when we consider that we were working with a preparation which was probably not at all equal in strength to chemically pure podophyllotoxin.

It will be observed that the absence of any effect upon the circulation and temperature is a matter of importance, especially in a class of drugs the influence of which, in the main, is depressing.

A few days ago, two healthy adults took respectively $\frac{1}{10}$ gr. and $\frac{1}{7}$ gr., hypodermatically, from this same solution that had been used in the Hospital, and was now some two months old. There was no cathartic effect produced, the glucoside having probably undergone decomposition. There was not a little local irritation at the seat of injection.

Elaterin.—$C_{20}H_{28}O_5$—is the principle of elaterium, and when pure is obtained in colorless, shining, hexagonal scales or prisms, with an acrid and extremely bitter taste. It is soluble in 125 parts of alcohol at 15° C., in two parts of boiling alcohol, in 290 parts of ether, in amylic alcohol, carbon disulphide, and chloroform. It is insoluble in petroleum benzine. According to various authorities, it is present in elaterium in from 15 to 50 per cent. BRUNTON states that elaterin used in subcutaneous injections "acts on the nervous system, causing salivation, insensibility, tetanus, and dyspnœa, and also that it acts as a purgative when taken internally and appears to require bile in order to act." It is a powerful and valuable remedy, and is especially indicated in dropsies and in those cerebral affections in which a reduction of the general blood-pressure is necessary

The results of our experiments, if verified, will be much more satisfactory to the therapist. In two experiments we have used $\frac{1}{10}$ gr. and $\frac{1}{20}$ gr. of elaterin instantaneously. In neither instance was there any untoward effect—the kittens remaining playful and evidencing no discomfort during the time of operation of the drug, and in both cases large watery stools were produced within an hour. We have not, as yet, used it upon man.

Elaterium.—The striking difference in the results attained by us and those arrived at by other observers in the use of elaterin, urged us to extend our observations and make comparative experiments with elaterium.

Elaterium is a substance deposited from the juice of the squirting cucumber. It contains, besides elaterin, pectin, prophetin, ecbatin, or elateric acid, hydroelaterin, etc. We could not but think that a mistake had been made in setting down the physiological action of elaterium and its active purgative principle as ident-

ical, and we were inclined to believe that the distressing fatal symptoms observed after the hypodermatic use of elaterium were due to some other one of the ingredients of the juice than elaterin. It is certain that in no instance in our hands did the hypodermatic employment of elaterin lead to the results to be fouud set down in our standard text-books; while the employment of the elaterium did give rise to the apathy, somnolence, coma, dyspnœa, convulsions, and death, as described by former observers. Our confirmatory observations were as follows:

An extract of elaterium was prepared by treating four grains of the pulverized elaterium with 120 minims of commercial alcohol, and boiling for a few minutes. After cooling the clear extract was decanted from the insoluble residue.

In one case five minims of the solution (representing $\frac{1}{6}$ of a grain of elaterium) were diluted with an equal quantity of distilled water, and injected into a cat. In a second case ten minims of the solution (representing $\frac{1}{3}$ grain elaterium) were diluted with an equal quantity of water, and also injected into a cat.

The details of the cases are as follows:

Experiment 1 —Elaterium, gr. $\frac{1}{6}$, 1:40 p. m. 2:21 hard stools. 2:25 disturbed respiration, salivation, muscular weakness, attempted vomiting, symptoms rapidly increasing in severity. Coma, convulsions, profuse salivation, apnœa, and death at 2:38. Autopsy: lungs intensely congested; heart ceased action in diastole, and was full of blood; stomach and upper part of small intestine empty, injected, and succulent; large intestine impacted.

Experiment 2.—Elaterium, gr. $\frac{1}{3}$, 1:35 p. m. 2:45 some uneasiness. 3:45 somnolent. 4:30 still somnolent, apathetic, and has some salivation. No stool. No alarming symptoms. This kitten was given to the physiological laboratory the next day, that its organs might be used as injected specimens. When killed and opened, its alimentary canal was found to contain vast numbers of large lumbricoid worms. The small intestine was so distended that the injection was a failure.

We again used elaterin with the following results:

Experiment 3.—Elaterin, gr. $\frac{1}{25}$ 11:12 a. m. 2:45 has been sleeping most of the time since the injection was given. 3:35 same as above. 5:00 no stool—no bad symptoms.

Experiment 4.—Elaterin, gr. $\frac{1}{12}$, 11:16 a. m. 1:40 large watery stool 1:47 copious watery, yellowish stool. 4:30 cat quiet—no bad symptoms

Note.—The approaching departure of one of us for new fields of labor, interrupts the further prosecution of our joint observations. We, therefore, offer the results of our studies to our professional brethren without a promise of further extension, and a suggestion of what may be accomplished in the future, and as a guide, however insufficient, to the production of catharsis by means of hypodermatic medication.— Wm. L. Dudley, M. D., and Chas. H. Castle, M. D., in the *Med. News*, Nov., 1886.

Hyoscine as a Cerebral Sedative.—In an elaborate article based on an analysis of ten years, published in the Practitioner, November, 1886, J. Mitchell Bryce, M. A., M. D., F. R. C. P., thus states his conclusions:

A careful perusal of the cases thus briefly recorded will, I believe, justify the conclusion that hydriodate of hyoscine is a very powerful cerebral sedative.

About the rapid and thoroughly complete effect which it possesses in quieting delirium there can be no doubt. The questions that remain for consideration are, first, whether it possesses any advantage in this respect over other measures at present at our command; and, secondly, whether there may not be certain drawbacks attendant on its action which render its introduction into general practice undesirable.

The reply to each of these questions may, in my opinion, be made in favor of hyoscine.

First. As I have already said in the introduction of this article, there is, no doubt, room for this drug. Our present sedatives are certainly not sufficient to meet every case. If we except the atropaceous products, with which I am now dealing, the bromides, chloral, and morphine constitute the entire group of sedative drugs to which we have recourse with any feeling of confidence, either separately or in combination. One after the other these valuable medicines fail in urgent cases. The bromides have not the power; chloral and morphine are dangerous in many cases, and dare not be given. In case V, above recored, a case of saturnine delirium with contracted kidney, morphine was out of the question. In case VII —dilated heart with alcoholic liver and noisy, restless delirium—a dose of chloral sufficient to induce sleep might readily have caused fatal cardiac depression. Even in the case of hydrophobia, where the circulation was sound (but the medullary centres in a state of impending failure), the patient was unquestionably at the point of death from a large dose of chloral by the bowel, intended to calm the wild delirium. I need not refer to other calmative measures, such as chloroform, alcohol in its many forms, feeding, and moral restraint. It will, I believe, be clear to practitioners of experience, that when the advantages of these have been fully ensured in cases of cerebral excitement, there still remains, in many instances, an urgent demand for a remedy which can be readily administered, and will act immediately and for several hours, so as to afford quiet and rest not only to the patient, but to those around him. A remedy possessing these properties will be as valuable in hospitals as in private practice; and my experience is that for the troublesome, noisy delirium which disturbs a ward for a whole night, breaking the sleep, raising the temperature, and generally aggravating the symptoms of all bad cases in it, there is no treatment at once so prompt, successful, and safe as a hypodermic injection of hyoscine.

Before speaking of the drawbacks attending the employment of this drug, I wish to define what I consider the province of its application. Hyoscine and its allies, when employed in cerebral cases, are to be used only to combat urgent symptoms. They ought not to be expected to cure any disease. If they remove delirium and procure quiet and sleep, they certainly have proved their value and fulfilled the indication for their rational employment. Nothing more than this ought to be required of them. When this point is granted, one of

the chief objections to hyoscine—that its effects are temporary only—is anticipated; it is not intended to be other than a temporary remedy. At the same time it may be remarked that in a certain number of instances the symptoms once controlled by hyoscine have not returned, as was maintained several years ago by DR. LAWSON with respect to hyo-scyamine.*

A more serious disadvantage that might be urged against hyoscine is the unpleasant symptoms to which it sometimes gives rise in connection with respiration and circulation. Within half an hour the administration of a full dose (say $\frac{1}{100}$ to $\frac{1}{75}$ gr. hypodermically) it may cause failure of respiration in the form of rapid shallow breathing or even Cheyne-Stokes rhythm. It has also been observed that with some patients cough has been aggravated on the nights that hyoscine has been given in delirious cases. At the same time the pulse may become weak and infrequent, the face livid, the pupils dilated—the whole appearance of the patient being calculated to cause anxiety. *Per contra*, it is to be observed that the above cases include instances in which hyoscine was given with perfect safety in double pneumonia, in urgent cardiac dilatation, and in chronic Bright's disease with delirium—conditions which might certainly be expected to test the dangerous influence of a drug on the great vital centres. I am not aware that death can in any recorded instance be attributed to an overdose of the drug, although it is evident that patients may die from the effects of the disease shortly after the administration, as in the hydrophobia case, their condition being desperate. What is most to the point, however, is the assurance that perfectly good results have been obtained from doses far short of producing unpleasant symptoms; indeed, $\frac{1}{200}$ gr. subcutaneously has been found in my wards to be the most useful working dose.

A very interesting point in connection with the action of hyoscine may be most conveniently mentioned here. It is stated as a fact by several observers, both American and German, that hyoscine does not produce unpleasant dryness of the skin and throat. I can not only confirm this statement, but go so far as to say that it frequently produces distinct increase of perspiration, as in several of the cases above recorded. This accords with FRÆNTZEL'S statement (Charité-Annalen, viii, p. 301, 1883) that hyosciue is of little value as an anhidrotic. We must not forget that in profound sleep with depression of the respiration and circulation there is a tendency to stimulation of the sweat centres, as is seen familiarly in phthisis. Still, if the alkaloid paralyzed the sudoriparous nerve-endings as completely as atropine, stimulation of the centres would have no effect upon the secretion. This remarkable effect of hyoscine appears to me to be another proof of the differences that exist in the action of the various constituents of the atropaceous plants; and to indicate the necessity of pursuing still further our investigations of the several active principles, so that they may come into general use instead of the crude preparation of the plants, in which they probably to some extent antagonize each other.

I would conclude this article with a brief account of the method of administering hyoscine to the greatest advantage.

The salt which I have employed is the hydriodate prepared by MERCK. It has been very kindly supplied to me by MR. MARTINDALE in the form of a simple aqueous solution prepared according to this formula:

℞ Hyoscine hydriodatis, gr. j.
Aquæ destillatæ, ℥ 200.
Misce et fiat solutio.

One minim contains $\frac{1}{200}$ gr. of the salt. It is of course desirable to use as fresh a solution as possible. This preparation may be given either subcutaneously or by the mouth. My own experience is decidedly in favor of administration under the skin, which, besides being the more practicable or perhaps the only possible method with delirious patients, unquestionably secures rapidity and certainty of action. Case V above is an excellent instance of the less satisfactory result obtained from oral administration. I find that this is the general opinion of those who have tried hyoscine, although DR. WETHERILL, Jr., of Philadelphia, gives the drug preferably by the mouth.* The dose of hydriodate of hyoscine varies from $\frac{1}{200}$ to $\frac{1}{100}$ gr., or even $\frac{1}{50}$ gr., hypodermically. In America the average working dose has been fixed at $\frac{1}{100}$ gr. After using it in doses of $\frac{1}{200}$, $\frac{1}{150}$, $\frac{1}{100}$, and $\frac{1}{75}$ gr., my house-physicians, MR. FREEMAN and MR. HARDY, to whose laborious and intelligent observations I am indebted for the notes of the cases which illustrate this paper, have come to the conclusion that most of the benefit to be expected from hyoscine may be obtained with doses of $\frac{1}{200}$ gr., without any risk of unpleasant effects. The dose that I would recommend for ordinary cases of restless, noisy insomnia and delirium is therefore $\frac{1}{200}$ gr. hypodermically. If the symptoms be very urgent, or amount to violence, $\frac{1}{100}$ gr. may be safely given, or even $\frac{1}{75}$ gr. with caution, the general condition of the patient being carefully taken into account. It will have been observed that in one instance $\frac{1}{25}$ gr. was administered with safety to a patient with plumbism and chronic Bright's disease; but so large a dose (although it did no harm in this particular case) is not to be recommended as safe. By the mouth a considerably larger amount is required than under the skin—in my experience $\frac{1}{100}$ gr. to $\frac{1}{50}$ gr.; but I have tried this method very little, and I find that DR. WETHERILL, Jr.,† is satisfied with $\frac{1}{120}$ to $\frac{1}{90}$ gr. given at bedtime in insomnia. We have usually administered the drug but once a day—in the evening, in order to secure a quiet night; but in cases of high delirium it has been repeated within four or six honrs with safety and advantage.

Hyoscine has been tried in other conditions besides cerebral excitement, especially in convulsions, asthma, and night-sweating. I have had no experience of the drug in these classes of cases. Its comparative failure as an anhidrotic has been already referred to.

VERTIGO, AND ITS TREATMENT BY BLISTERS.—DR. CHARLES E. WILLARD, OF Catskill, N. Y., writes to the N. Y. Medical Record as follows:

* Practitioner, xvii, p. 7.

* The Polyclinic, Feb., 1886.
† Loc. cit.

"Having had under my professional care during the past winter an unusually large number of cases of stomachal vertigo, I feel constrained to place upon record some of them, as they differed somewhat in their most prominent symptoms from those usually recorded as classical. I hope that that which caused me much vexation of spirit will prove of service to some other members of the profession who, like myself, have been driven to the wall by these often stubborn and intractable symptoms.

"To be brief, then, I will begin at once with some of the symptoms as witnessed in MR. J., aged forty-two. The first attack occurred while upon a ladder. The sensation, as he graphically described it to me, being as though an earthquake was about taking place, the house and the ladder moving as though on the waves of the ocean, rolling and pitching, but always with the roof ahead, and never turning sideways; a sensation of fear, and a peculiar sick or faint feeling at the pit of the stomach; the knees also appearing to lose all their strength; during all this time he was conscious there was no earthquake, or that the house was anything but standing firmly. His arms were not affected by the general weakness, and by holding himself closely to the ladder he avoided falling; and in a short time, the symptoms passing off in a measure, he was enabled to safely descend the ladder. There were no further developments that day; but the next morning, upon awakening and turning upon his left side in the bed, he immediately had a return of the dizziness, only this time the bed seemed to go pitching around the room, always the foot of the bed first (ahead), as though it were floating rapidly upon a huge wave of water, never turning over upon its side, but always remaining level. After resting for a while upon the back the symptoms in a measure subsided, but upon again turning upon the left side there was a reappearance of all the symptoms just described, with the addition, this time, of a shower as of black soot falling before the eyes. All subsided again in a short time by turning upon the back, and after taking a short nap he carefully turned upon the right side and was enabled to get up, slowly dress himself, and eat a light breakfast. During the next ten days these symptoms occurred at irregular and uncertain intervals, accompanied by headache of a peculiar and distressing character, completely preventing any kind of labor, either physical or mental; there was some slight hesitancy in the speech; great mental depression, as though upon the border of some impending evil; during this time walking was very uncertain; upon making any effort to turn to the left he was likely to fall, or stagger off of the sidewalk into the street. Whenever it was necessary to turn a corner to the left, it was necessary to walk to the end of the curb, make a slow and complete circle to the right the whole width of the sidewalk, and then go ahead again.

"In another case, MRS. W., the symptoms followed an attack of erysipelas, and for two days and nights there was frightful headache, the patient remarking as though her head was in a vice, the pressure being upon each temple. During these forty-eight hours there was constant nausea, with frequent vomiting and retching, nothing but froth and mucous coming from the stomach, as there was no food taken during this time, the pain meanwhile being most severe upon the right side of the head. The patient was confined to the bed for ten or twelve days. The dizziness was so great that she could not sit up, even in the bed, without producing faintness and vomiting. During all this time there was a constant roaring in the head as of a waterfall, a ringing in the ears, more especially the right, together with pain, and before each eye a large wheel, revolving rapidly, with broad spokes with deep notches between, the wheels apparently approaching each other, and then receding, constantly. Upon looking up she could read the print of a newspaper, but upon looking down everything was a blot and dizziness.

"This case, unlike that of MR. J , had a recurrence of the dizziness upon looking or turning to the right, even lasting some days after she was able to be moved from the bed. There was a constant and severe pain at the back of the neck, more especially upon the right side, together with a fulness and throbbing which could be seen and felt; the pain extended down the whole length of the spine, and alternated with the dizziness. When the head was most dizzy the pain in the back was less severe, and *vice versa*.

"In another case, that of MRS H., the dizziness was always accompanied with a dull, aching pain in the left lung. The pain did not interfere with the breathing, and upon auscultation the lung was found to be free from disease of any kind. The pain in the lung always disappeared with the dizziness. In this case the patient was often awakened suddenly in the night, the dizziness and pain already present, when the bed, room, and furniture would apparently be pitching about in the greatest confusion. These distressing symptoms would last from one-half to one hour, and then subside, leaving a peculiar feeling in the head not to be described, with soreness and pain, as though from some severe side-pressure. This also would wear off in the course of twenty-four or forty-eight hours, sometimes, but not always, followed by vomiting. During the continuance of the symptoms no food could be taken or retained by the stomach.

"In another case, that of a gentleman, MR. H., aged fifty-five, the attack would occur so suddenly that on several occasions he fell upon the floor, and was unable to rise for some time. I might go on and mention a number of other cases, each having some peculiarity of its own in common with the general symptoms, but I have already exceeded the original limit of this paper.

"Now for the treatment. After trying the various remedies recommended in the text-books, and not deriving the results I desired, I applied blisters to the neck, and in some cases, when the pain in the back was severe, all the way down the spine. The result of the blistering was very satisfactory, improvement beginning almost immediately, and my patients are to-day attending to their ordinary duties. Of course I did not neglect, but continued general treatment. I think that the use of blisters in these cases cannot be too highly recommended, even though we cannot explain the *modus operandi*. In the treatment of these cases I used a blister which does not contain cantharides, and which is free from the exceedingly un-

pleasant complications of strangury. These blisters, or 'issue plasters,'* as they are called, have proved very satisfactory in my hands, not once producing unpleasant symptoms—they blister quickly, without pain of any consequence, and by returning them to the blistered surface an issue can be kept up for any desirable length of time—and, as I remarked above, without the slightest fear of strangury occurring as a complication. I greatly fear that with the general practitioner the beneficial effects of judicious blistering, in these and other similar cases, is oftentimes lost sight of in dread of the unpleasant symptoms produced by cantharides."

IRON ALUM AS A STYPTIC—A NEW METHOD OF TREATING WOUNDS.—DAVID CHRISTIE, L.R.C.P., in the Med. Press, Nov., 1886, describes a new method of treating wounds as follows, viz:

I propose to bring under your notice a simple and successful method of treating wounds, and the circumstances which induced me to adopt it. Before attempting this, I must briefly give the ideas entertained by others on this subject up to the present time. Old authorities say—"wherever effusion of fibrine is attended with a continuance of acute inflammation, or when there are certain defects in the composition of the blood, the fibrine softens down, and with the cells, which have undergone certain changes, become a creamy liquid called pus." And of healing or repairing they say—"the material employed is liquor sanguinis or the fluid part of the blood; but especially that constituent of it which has the power of spontaneous coagulation, which is commonly known as *fibrine* or *coagulable lymph;* and that it does not heal until the lymph is coagulated; and that whatever favors inflammation is hostile to repair."

For a considerable time past it has been an established fact that subcutaneous wounds healed quickest; it was afterwards ascertained that the reason why open wounds were slow to heal, was that germs entered them causing decomposition and the formation of pus. This theory led to another called the antiseptic system; its doctrine, keep away certain organisms and drain the wound, then inflammation and suppuration will be prevented. All this amounts to how a wound heals, and how to guard it from those things that prevent it healing. Now, I have reason to believe that I have found a way that takes advantage of all this information, but in addition to it, it assists the wound to heal from the moment it is employed. I discovered it when I was not looking for it at all; and this is how it happened: A little girl came to me, in whose hand a few days previously I had stitched a large deep wound which bled profusely every time it was dressed; to stop the hæmorrhage I touched it with iron alum; the bleeding ceased in a few seconds; next day I examined it and found the wound very clean and healthy; it subsequently healed in a very short time. A few days afterwards a lady came under my care to have a fatty tumor removed. She was rather anæmic, so I thought I could not be too careful to prevent loss of blood. I made an incision six inches in length down to the capsule, applied the iron alum; about a teaspoonful of blood was lost; enucleated the tumor and tied a small artery at the bottom of the wound, removed the coagulated blood, brought the parts together with a continuous suture, put a piece of surgeon's lint over it slightly moistened with glycerin and water, over this oiled silk, and over it padding and a bandage to press the surfaces accurately together. Next day I found the dressing slightly blackened by the iron, but no perceptible discharge or swelling; dressed as before. On the third day I removed the sutures, and fourth day found it completely healed except the part occupied by the ligature. Next case was a man having a loose cartilage in the knee-joint larger than a garden bean. I made an incision in the usual way down to the ligament, an inch and a half in length, applied the styptic, only a few drops of blood escaping; then cut through the ligament and removed the loose cartilage; brought the wound together by a very narrow strip of adhesive plaster across the centre of it; dressed as in the former case; ordered dressings to be changed next day but not afterwards, and the limb to be kept at rest. This person lives sixteen miles from my residence, but I got a letter from him telling me that on that day week from the time I performed the operation the wound was completely healed and the functions of the joint perfect. DR. HUNTER, of Ramelton, assisted me at both operations and knows all about them.

The last case I will refer to is that of a young man who received a deep lacerated wound between the metatarsal bones of the first and second toe, caused by treading on a sharp piece of iron; there was profuse arterial hæmorrhage, as the position would lead one to expect. I endeavored to stop it by applying a piece of iron alum, but failed owing to the depth and shape of the wound. I then put a considerable quantity of powdered iron alum into and on it, tying over it some wadding, then the bleeding ceased. Next day I examined it, and with difficulty removed the dressing, as the effused blood had set like cement; there was neither discharge, swelling, nor the slightest appearance of inflammation, and almost free from pain, so much so that on the third day he resumed his usual employment in the fields. This tore the wound open again; I was obliged to put a suture in it, touched it with iron alum, and it was completely healed in about six days.

Then I thought I was in duty bound to investigate the matter as far as I could and bring it under the notice of others, who had more leisure and opportunities of doing so than I had. I began by trying the action of all the styptics on some fluid I had removed from a hydrocele; most of them made it milky or creamy, the perchloride of iron gelatinous, but it would not adhere to the test tube. Having twice seen it act as an escharotic in scalp wounds, I gave myself no further trouble about it. A saturated solution of iron alum instantly converted it into a cheesy mass, firmly adherent to the test tube. This, after exposure to sun and air for a month, has undergone no change, except contraction from evaporation. The iron alum added to the same fluid in a fœtid state instantly coagulated it and deodorized it as much as carbolic acid did. From all this it is

* The issue plasters used were those manufactured by Parke, Davis & Co.

evident that this medicine has a character entirely different from any other of its class, for although the most powerful coagulator of albumen, and antiseptic, yet it has no irritating or destructive action on the living tissues; keeping this in view helps to explain its curative effect, and how it does exactly what is required, *i. e.*, stops hæmorrhage by coagulating the liquor sanguinis, at the same time rendering it antiseptic and at once ready to heal, and by its astringent action preventing exudation, congestion or inflammation. I can easily imagine how useful it may become, how in the battle-field one surgeon could do the work of six, and do it more efficiently, and how the soldier, with his own hands, by it might save his own life; how abdominal surgery might be simplified, where oozing from small blood-vessels and defective drainage is the chief danger. In short it does all that the Listerian system does, but it does far more, without trouble, expense, or risk. Ligatures, bandages, dressings, etc , are reduced to a minimum, healing expedited to an extent that to be believed must be seen.

On the General Treatment and Dressing of Wounds.—James Whitson, M. D., F.F.P.S.G., F.R.M.S., in the Lancet, Sept. 4, gives the following practical hints on the treatment and dressing of wounds:

During the last few years the treatment and dressing of wounds have undergone a marked change for the better. The introduction of the antiseptic system has led to improvements in both these ways which not long ago were undreamt of. Prior to this great epoch in surgery wounds of any magnitude were daily to be seen discharging large quantities of pus, and at brief intervals epidemics of pyæmia decimated the wards of hospitals in a manner truly alarming. Under an antiseptic régime, however, these complications have been banished as if by the enchanter's wand, and at the present time suppuration is a factor with which we seldom require to deal, while pyæmia and hospital gangrene are scourges almost unknown. To all who are familiar with the difficulties surrounding the early elucidation of the subject, it need scarcely be remarked that the realization of such a degree of excellence has not been achieved at a single bound.

The proper dressing of a wound is indispensable for its satisfactory progress. Unless in those instances where the discharge has become septic, dressings should be removed as seldom as possible, absolute rest being a *sine quâ non* for the progress of healthy repair. In the carrying out of this important item our great aim should be the selection of a dressing in which are united a capacity for ready absorption and a subsequent power of maintaining the parts in a state of asepticity. Fortunately we have at our disposal materials answering these requirements more or less completely. Of the various dressings which are placed in contact with the skin, there are none *cæteris paribus*, superior to gauze. Being porous, it permits of the ready penetration of blood or serum through its meshes, and when properly prepared and in fresh condition its antiseptic powers are undoubted. Eucalyptus gauze is preferable to the carbolized variety, though at present it possesses the drawback of being the more expensive of the two. Owing to the volatile nature of antiseptic principles, both kinds of gauze should be placed in air-tight boxes as soon as saturation is effected. By this means evaporation of their essential constituents is prevented. For a number of years after the introduction of the antiseptic system layers of gauze surrounded by an outer layer of jaconet composed the dressing placed over a wound; but in following what was then the ordinary custom, experience soon showed, if there was much oozing, as there frequently is after major operations, that stains quickly made their appearance at the lower end of the dressing, thus necessitating its frequent removal, and thereby forcing us to adopt a most objectionable practice. In order to obviate this alternative, recourse can be had to layers of carbolized tow, which when thoroughly teased forms an excellent supplementary dressing. The compression exercised by rolls of this material is regular and steady, and owing to the elastic nature of these when enveloping a limb the circulation is unlikely to be interfered with, even though the bandages are put on somewhat tightly. Any discharge which happens to pass outside the gauze is taken up by the tow, and in consequence of the impregnation of its fibres with carbolic acid a state of asepticity is maintained for a much longer time than could be done without it, and repeated changes of dressing are thus rendered unnecessary. Of late, however, tow, and to a considerable extent gauze, have come to be superseded by wood-wool as well as by wood-wool wadding, two forms of external dressing not without special merits. Both possess considerable absorbent power, and when made into pads of the requisite size and thickness do admirably to envelop the first two or three layers of gauze. In the preparation of the wood-wool pads care should be taken to see that the wool is properly distributed throughout, so that the pressure which is afterwards brought to bear on the underlying structures may be equitable. It will be found, for example, that wood-wool is superior to tow in checking any tendency to oozing immediately after an amputation, by the regular compression which it exercises over and for some distance around the stump, while the immobility which its presence confers is a factor in furthering the after-progress of repair, which should not be lost sight of. When a dressing is intended to remain on for some time, it is advisable to adopt the precaution of dusting the gauze we purpose employing with iodoform. The powder in question is a reliable germicide, and corroboration of this property has been frequently witnessed in several of the wards of the Glasgow Royal Infirmary, where a species of fungus used regularly to develop itself in the gauze which was at one time supplied, but it was always noticed that the organisms never appeared or encroached upon the area sprinkled with iodoform—a test which clearly proved the value of the compound in checking the spread of such a form of life. The elastic bandage is a valuable agent in the treatment of wounds of any size. When properly applied, it maintains the dressing firmly in its place, and by so doing ensures the keeping up of steady compression —points which contribute in no slight degree to promote the general weal.

THE USE OF CUCAINE IN MAJOR OPERATIONS.—Although cucaine is in general use in minor surgery, its employment in major operations is still *sub judice*. I venture to think, therefore, that the following records of cases which have just occurred in my practice, may prove of interest. A middle-aged man was admitted into the Leeds General Infirmary, under my care, with an epithelioma about the size of a walnut, near the apex of the tongue on its right side. I advised removal by means of the galvano-écraseur, but as the patient objected to take ether, I decided to operate under cucaine, of which one grain, dissolved in ten drops of water, was injected deeply into the tongue beyond the tumor, the needle of the syringe being pushed up to the hilt, and the fluid expelled in several places as the point was withdrawn. After ten minutes he assisted by projecting his tongue to its utmost, when I pushed two harelip pins through, crosswise, beyond the tumor, the loop of the écraseur being placed beyond them. The included part was removed without difficulty, and absolutely without pain; in fact, he exclaimed at the end of the operation, as well as he could with the portion of tongue remaining, "that is up to the mark." He made a good recovery.

The next case is that of a gentleman, aged 26, sent to me by his physician for the purpose of having a very large varicocele excised. He being desirous to do without ether, I injected a grain of cucaine as in the last case, by one puncture just beneath the skin where the incision was to be. After ten minutes I made the incision, applied a double ligature to the varicocele, excised an inch and a half, and inserted a single suture in the skin, the whole operation occupying about five minutes. He said he felt no pain, and only a slight sensation when the scissors divided the veins. Healing occurred by first intention, and he was out on the ninth day.

Until I used cucaine in the above cases, I had only employed it in small operations, such as amputation of digits, removal of ingrowing toenail, circumcision, removal of needles from the hand, etc., and in all such cases, I have found it to act much better if, immediately after injecting, a tourniquent was applied to prevent the circulation carrying the drug away from the part to be operated on.

As hydrochlorate of cucaine is very soluble in water, I find it most convenient to carry it in half-grain or one-grain powders, which can be dissolved immediately before use. Only twice have I seen any unpleasant effect follow its employment; once in a circumcision in an adult, when a one-grain injection was followed by faintness and dizziness, which lasted for an hour and a half. Again, in the case of a middle-aged gentlemen, who became partly aphasic and unable to write, half an hour after a grain had been syringed into the roof of the nose for the purpose of anæsthetising before removing a nasal polypus. His symptoms lasted four hours, after which he was perfectly well. Query: Could the anæsthetic effect have extended to Broca's convolution?—A. W. MAYO ROBSON, F. R. C. S., Eng., in *British Med. Journal.*

DOSAGE OF SOME OF THE NEWER REMEDIES.—The Rundschau, Leitmeritz, which is, by the way, one of the best German pharmaceutical journals, gives the following information concerning the dosage of the remedies which have come into general use since the last edition of the Pharmacopœia:

Osmic acid: Best administered in pill form (made up with American bole). The dose $\frac{1}{60}$ grain, which may be repeated several times a day.

Agaracine: Best administered in combination with Dover's powder. Dose, $\frac{1}{12}$ to $\frac{1}{6}$ grain.

Aloin: From $\frac{1}{8}$ of a grain to $3\frac{1}{2}$ grains, in pill form.

Antipyrine: Dose, from 75 to 90 grains, divided into 3 portions, one of which is to be taken every hour.

Bismuth salicylate: Dose, from 5 to 7 grains, in pill form. In typhoid this may be doubled and repeated every hour, up to ten or twelve times.

Canabinone: From $\frac{2}{3}$ to $1\frac{1}{2}$ grains. Best administered mixed with finely ground roasted coffee

Caffeine: To commence with, the dose should not be over 3 grains, but this may be repeated every hour until four doses are taken, or say 12 grains *per diem*. This may be increased to double the amount mentioned. The benzoate of sodium and caffeine is a double salt which contains one-half its weight of pure caffeine. It resembles the salicylate of sodium and caffeine, but the latter contains more caffeine (10 parts of caffeine to every 16 parts of the double salt).

Colocynthin: Used subcutaneously. The dose is from $\frac{1}{6}$ to $\frac{2}{3}$ grain. It may also be administered in pill form by the mouth, the requisite dose being from $\frac{1}{2}$ to 1 grain.

Convallamarine: Internally, in pill form. The dose is from $\frac{3}{4}$ to $1\frac{1}{2}$ grains, and it may be repeated every hour, until a total of 15 grains is reached.

Euonymin: Best given in pill form, combined with extract of belladonna or hyoscyamus. The dose is from 3 to 10 grains.

Helleborein: May be given in pill, solution, or in suspension in some mucilaginous vehicle. The dose is from $\frac{1}{6}$ to $\frac{1}{3}$ grain, repeated four or five times in the course of a day.

Tannate of mercury (protoxide) may be given in a wafer. The dose is $1\frac{1}{2}$ grains repeated thrice daily.

Nitroglycerin is best given in alcoholic or oily solution The dose is $\frac{1}{350}$ to $\frac{1}{60}$ grain, repeated several times daily. ROSSBACH prefers ether as a solvent. His formula for its use is as follows: Dissolve $1\frac{1}{2}$ grains of nitroglycerin in sufficient ether, and add the solution to a mixture consisting of two ounces of powdered chocolate and one ounce of gum-arabic. Mix very thoroughly and divide into 200 pastilles. Each pastille will thus contain $\frac{1}{333}$ grain of nitroglycerin.

Picrotoxine: In aqueous solution. Dose, from $\frac{1}{8}$ to $\frac{1}{6}$ grain.

Sulphate of thalline may be given dissolved in wine or water (with some corrigent). The dose is from 4 to 8 grains.—*St. Louis Med. and Surg. Jour.*, Oct., 1886.

THE ANTIPYRETIC ACTION OF ANTIPYRINE AND ANTIFEBRINE.—At the meeting of the Verein für innere Medicin at Berlin on the 18th ult. DR. A. FRANKEL read a paper upon Antipyrin (see Münchener Med. Wochensch., Oct.

26th), especially in the treatment of acute rheumatism. Having prescribed it in 34 cases of this diseases he arrives at the conclusion, supported by the published observations of LENHARTZ and ALEXANDER, that its action is that of a specific. Rapid recovery ensued on its administration in nine out of 13 mild cases, and in four out of 21 severe cases. It is superior to salicyl compounds; first, in the readiness of administration, being given in the amount of 15 grammes during the first three days, and of three grammes daily during the next six days; and secondly, in the freedom from unpleasant physiological effect. He only once noted vomiting after antipyrine, and twice an "antipyrine rash" appeared. Free sweating occurs with the defervescence produced. Respecting protection from endocarditis he is unable to pronounce from paucity of material, but some authors think this must be answered in the negative. Nor can it absolutely replace other anti-rheumatic remedies; for in two cases it had no effect and in 15 cases there was relapse. He did not know of any contra-indications for its employment, and summed up to the effect that antipyrine is an energetic specific anti-rheumatic agent; that its trifling physiological effects make it important to prescribe it at first in every case of acute articular rheumatism, but that it is no substitute for salicylic acid, some cases reacting to the one drug and some to the other. DR. FRANKEL also reported on antifebrine, introduced by the Strasburg school—a substance of exceptional interest, since in chemical composition it differs from any other known antipyretic. It is derived from aniline, is an odorless powder, slightly soluble in water, but readily dissolving on the addition of rectified spirit. It produces slight toxic effects, does not induce vomiting and is not repugnant to take. In hourly doses of 0.1 gramme it causes a transient fall in temperature of from 3° to 4° C. DR. PAUL GUTTMANN, in discussing the paper, remarked that of 18 cases of acute rheumatism treated with antipyrine the average duration was 25 days, and of 67 treated with salicylic acid, 35·2 days. — *London Lancet*, Nov., 1886.

MODE OF ADMINISTERING PERMANGANATE OF POTASH.—If those of the profession who have used the permanganate of potash for amenorrhœa in the compressed form prepared by WYETH & CO., or in capsules, have met with as unpleasant results as have followed our prescriptions, the chances are that the drug in that form has been banished from their repertory. In every case in which we have given it in the compressed form, or in capsules, in one or two-grain doses, it has been speedily followed with retching and vomiting, with burning pain along the line of the œsophagus and in the stomach. The pulse became rapid and weak, and hours elapsed before the intense burning and great prostration were at all diminished, notwithstanding the patient was instructed to drink large quantities of water. Probably there is no drug which oxidizes so rapidly as the permanganate of potash, and as it passes along the œsophagus and enters the stomach, the oxidation is so rapid that it is likely to produce intense congestion. There is no doubt, however, if the drug is properly administered, it will be highly beneficial in most forms of amenorrhœa, more especially those of young girls. If the drug is combined in the form of a pill with a liberal supply of kaoline and vaseline, say one and a half parts of kaoline to one of the permanganate, it oxidizes more slowly, and in our experience, is hardly ever attended with any unpleasant result. A pill containing one or two grains given 3 times a day, has proved in our hands highly advantageous in the amenorrhœa of girls, and also of more advanced age, arising from general anæmia, the result of study and mental anxiety. Binoxide of manganese is said to have all the beneficial effect in menstrual irregularities of the permanganate of potash; it should not be used during pregnancy or in cases of acute congestion, and general conditions of sthenic reaction.—*N. Y. Med. Times.*

THE MEANS OF PREVENTING THE DETERIORATION OF RUBBER APPARATUS.—An inquiry has been carried out under the direction of the French Minister of War, with the object of ascertaining the cause and the remedy for the peculiar changes which articles made of india-rubber undergo when kept in stock, the annual loss to the government from the deterioration of this class of goods being very considerable. Experience shows that india-rubber, after a time, loses the very qualities which make it useful, for it becomes dry and brittle. Articles kept in boxes, such as Higginson's syringes, Esmarch's bandages and drainage tubes, are particularly liable to deteriorate, as are also the insufflation bulbs so largely used in connection with spray-producing apparatus and thermo-cauteries. Unfortunately, the results of a long and patient investigation are not by any means satisfactory, so far as the discovery of a means of prevention is concerned. Nevertheless, certain precautions are advised, both in the quality and storage of india-rubber goods, which, it is hoped, will do something to minimize the loss. The commissioners advise, for instance, that Esmarch's bandages should be taken out of the boxes at least once a month, unrolled, and manipulated. Drainage-tubes should be hung up in a cool place, or soaked in a non-putrescible fluid. Finally, all objects made of rubber should be kept in a cool, damp place, at a constant temperature, and sheltered from light, heat, and frost. Seeing that, in many cases, these conditions cannot be complied with, it is recommended that the bandages should be made of pure leaf rubber, in lieu of the elastic tissue usually employed. The purer the rubber the less readily does it undergo these structural alterations, and the lighter it weighs; its weight is therefore a sure guide to its quality. In consequence of these inquiries, the Minister has ordered that in future all rubber articles are to be made with pure rubber of the best quality, preferably with the leaf rubber. The quality of the articles will be gauged by their specific gravity in order to insure the purity of the material employed.—*British Med. Journal*, November, 1886.

FLUID EXTRACT OF MARIGOLD IN EXTENSIVE BURNS.—DR. SEXTON presents the following points of practical interest at the 19th

annual session of the Mississippi State Medical Association, the Transactions of which meeting have just been published.

Having had a series of severe cases of burns during the past year, I have thought my experience with the fluid extract of calendula officinalis might prove of interest to the profession.

My first case was a little child, severely scalded by pulling over a pot of boiling water. This burn might be classed of the second degree. I ordered a drachm of the fluid extract of calendula to an ounce of the carbolized oil, and had the most satisfactory results. The child stopped screaming as soon as the oil was applied, and made a rapid recovery in two weeks. The skin had peeled off from the elbows down to the hands.

The second case was one where the clothes had caught fire, and was more or less burned all over the back. In some places even the flesh was charred.

The same application was made, with equally good results. The carbolized oil itself is a good dressing, but its healing properties are increased tenfold by the addition of drachm of marigold to the ounce of oil. It has another advantage of rendering the oil much less offensive to the olfactories. The odor of marigold is pleasant, and it makes an efficient dressing in cases of severe ulcerating sores and wounds. I found it of invaluable service in treating the extensive wounds and lacerations after the cyclone at Wesson and Beauregard, and deemed it of sufficient importance to call especially the attention of our association to its virtues.—*Med News.*

NOTE ON THE TREATMENT OF THREAD-WORMS IN CHILDREN.—The complete cure of thread-worms in children is often very difficult. While the ordinary methods used, such as rectal injections of salt and water, infusion of quassia, and other remedies, do good for a time, yet they often fail to relieve the attendant symptoms of "worms," symptoms usually very irregular, and in some cases severe, in character. In many cases, though the irritation about the anus is relieved by injections, the irregularity of the bowels and the disturbance of sleep remain the same. This is probably due to the fact that the habitat of the worms is higher up in the large intestine, where no remedy introduced by the rectum can reach them.

In many cases I have found that rhubarb in small doses brings away large numbers of worms, and at the same time regulates the bowels: so that the use of injections may in most cases be dispensed with. The formula which I have found most useful is as follows, varying slightly with the age of the child:

℞ Tincturæ rhei, ♏iij.
Magnesii carbonatis, gr. iij.
Tincturæ zingiberis, ♏j.
Aquam, ad ʒ j.

This is to be taken twice or three times daily according to the effect on the bowels. Whether the rhubarb acts as a vermicide or simply by "moving the worms on," I am unable to say.—SIDNEY MARTIN, M. D., in *The Practitioner*, Oct., 1886.

HOW THE THERAPEUTIC VALUE OF OUR MINERAL SPRINGS MAY BE INCREASED.—DR. C. C. RICE, of New York, recently read a very interesting paper before the American Climatological Association, at its annual meeting, comparing the kinds of life at the mineral springs of Europe and America, and the methods of employing the waters for therapeutic purposes. He makes the following practical suggestions for increasing their value to those seeking renewed health through such agencies:

1. Physicians, individually or in committee, should make careful analyses of our mineral waters.

2. The medicinal value of the waters should be tested by clinical investigation, and the conclusion arrived at given to the profession.

3. If the waters are found to possess marked medicinal merit, physicians should interest themselves in the development of the springs and the improvement of bath-houses and apparatus.

4. Physicians, in sending patients to a mineral spring, should be most careful to select the proper water, and should send with the patient his history and the diagnosis of his disease, for the benefit of the physician at the bath.

5. Patients at our mineral spas should be placed under more rigid medical discipline, and more attention should be paid to their habits of living.

6. The social life at our watering-places should be placed on a more wholesome basis.—*College and Clinical Record*, Nov., 1886.

IODOFORM POISONING.—DR. CUTLER, in the Boston Medical and Surgical Journal, gives seventy-seven reported cases of poisoning consequent upon the use of iodoform in the treatment of wounds. The general symptoms were those of poisoning by iodine, namely, persistent taste and smell of the drug, impairing appetite and digestion, headache, sleeplessness, and delirium, the latter usually of a melancholy character, in extreme cases passing into absolute apathy with involuntary dejections, rapid, feeble pulse, and progressive marasmus. DR. CUTLER arrives at the conclusion that, (1) Fresh wounds, or unhealthy or tuberculous surfaces, are the only cases fitted for the application of iodoform; (2) only a thin layer or small amount of iodoform should be applied; (3) when granulations appear healthy iodoform should be omitted; and (4) at the first symptoms of poisoning, or even coincidently with the first use of iodoform, compounds of alkalies with organic acids, such as potassium acetate, should be given by the mouth at frequent intervals. If severe symptoms supervene, transfusion with a solution of common salt is recommended, and the wound, after being washed free from iodoform with pure water and a solution of an alkaline carbonate, should be dusted with magnesia.—*American Practitioner and News*, Oct., 1886.

THE VALUE OF EXTERNAL APPLICATIONS IN THE TREATMENT OF CHILDREN—EFFECTS OF COLD WATER.—When one hand is immersed in cold water the temperature of the other hand also falls. Cold not only cools the surface of the body but effects markedly the condition of

internal organs through the nervous system, especially in children.

Brown-Séquard has shown, by experiment, that cold applied to the lumbar region contracts the arterioles of the kidney, and consequently diminishes the blood-supply to those organs. When cold water is applied to the surface of the body the *cutis anserina* immediately becomes manifest, the skin becomes paler, the respiration is sobbing, and the pulse is quickened. If the temperature be not too low the condition of reaction soon supervenes. The coldness is succeeded by a feeling of warmth, and the depression by a feeling of exhilaration. The bath should not be continued too long for this tonic effect.

If the tonic effect is well shown the circulation is equalized and invigorated, tissue metamorphoses take place more rapidly, and with the increased tissue changes and activity of assimilation the appetite is increased, and the body gains in weight and strength.

The cold bath should have a temperature of from 40° to 70° F.—*Ecchange.*

Quinine and Oil of Turpentine in Malignant Pustule.— Dr. Don F. Rivas describes in La Union de las Ciencias Médicas some cases of malignant pustule which were rapidly cured by the application of a paste composed of quinine and oil of turpentine. One of the cases was that of a shepherd, in whose flock the disease had manifested itself. He was stung by a mosquito on the forehead, and two hours afterwards the head and neck were extremely œdematous. The paste was applied, and the pain and swelling shortly diminished. A couple of days later a large quantity of sanguinolent fluid was discharged, and by the fourth day the man was quite well. Another shepherd of the same flock, who was similarly affected, made use of some of his colleague's paste without consulting a doctor, and was also cured in four days. A third case was that of a woman who had a malignant pustule on the hand, which was unaffected by several remedies which were applied, but on the application of the quinine and turpentine paste the severe pain ceased almost immediately, and the œdema rapidly diminished, the patient being quite restored to health in four days' time.

Warts Cured by Internal Medication.—M. Colrat reported a series of cases to the Lyons Society of Medical Sciences, illustrating the treatment of warts by magnesia taken internally. Several children to whom ten to fifteen centigrammes (two to two and a half grains) twice a day were administered were promptly cured; others proved refractory for several months; while others still were absolutely unaffected by the treatment. Even large warts (not polypi-form) have fallen off under this medication. The well-known tendency to contagion—*i. e.*, from the hand to the face—has been attributed to a specific cause; and M. Cornil has found a microbe in tissue of the little growth. M. Aubert reported the case of a woman whose face was covered with warts, though none were found on her hands. She recovered entirely after the administration of magnesium sulphate—six grammes daily—at the end of six weeks. M. Roux mentioned a case having large and numerous warts cured in fifteen days by the administration of fifty centigrammes daily.—*La France Médicale*, October 16.

Biniodide of Mercury, a Specific and Prophylactic for Scarlet Fever and Diphtheria.—Dr. C. R. Illingworth thus writes to the British Medical Journal: In your issue of May 1st, you inserted a communication of mine relative to the biniodide of mercury as a specific for scarlet fever and diphtheria.

That it is a true specific for the former, is proved by the defervescence commencing immediately upon the administration of the medicine, instead of upon the fifth day, and by the absence of disquamation in consequence. That it acts as a specific in the latter, is shown by the rapid desappearance of the membranous effusion and reduction of temperature. The efficacy of the medicine depends, I think, upon the diffusible potassic iodide carrying the germicide biniodide to every portion of the circulation. Prescribed in this form, the biniodide of mercury has not, so far as I am aware, been used before for these diseases.

To Arrest Nasal Hemorrhage.—We take the following practical suggestion of Prof. John Chiene, from the Edinburgh Medical Journal:

In persistent hemorrhage from the nasal cavity, plugging the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot which forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in any attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity, the clot consolidates in position and the hemorrhage is checked.

An Incompatible of Antipyrine.—In the New York Medical Journal, October 24, 1885, Dr. Eccles announces that while making pharmaceutical investigations, he had occasion to mix some sweet spirits of nitre with a solution of antipyrine. At first the mixture was clear and colorless, but after some hours of standing became green. The optical appearances of this fluid were identical with those of the anilines, and, as antipyrine was a coal-tar product, he supposed the change was due to the formation of a green aniline, and so it had proved to be. This incompatibility was all the more important as both substances were used for antipyretic purposes, and might be prescribed together.

Barbasco—a New Mexican Drug.—The Pharmaceutical Record, November, 1886, reports the importation from Mexico, of specimens of this new drug, which has been found useful in removing hair in skin diseases.

The Medical Age.

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Original Articles.

ECZEMA BARBÆ.*

BY C. C. YEMANS, M. D., DETROIT, MICH.

When we consider the texture of the skin and the many exigencies to which it is subjected in our daily life, we may not be surprised that there are so many skin lesions, but, on the contrary, that there are so few, for the anatomy of the skin is quite as complicated as the anatomy of the eye, while the physiology or function of the skin is so readily interfered with by external objects, as changes of temperature, etc. But when we come to consider the diagnosis of the different lesions of the skin, we find skin diseases very similar to each other, *by inspection*, are separated very far in etiology; and further that in their development essentially different lesions of the skin are, at certain stages of their evolution almost identical, objectively considered. Many substances with which the skin comes daily in contact are irritating, as color, heat, which are not substances, but, possibly, modes of motion, dyes, dust, contact with different classes of wood, the different trades by which men earn a living, as the mason, the painter, the baker, the tailor, the washerwoman, and the artist, bring one in contact with disease-producing objects.

I wish to present for this evening's consideration, eczema barbæ. The face is especially subject to several diseases of like appearance, differing, though, as far as possible in etiology and treatment. On the one hand, eruptions which call for the ministration of the physician, certain remedies being indicated, as in herpes. On the other hand, diseases of the skin which no internal medicine can alleviate, but on the contrary may much intensify, as, for instance, the exhibition of iodide of potassium in cases of acne, eczema, or sycosis. The differentiation of a case of eczema barbæ is neither so clear nor simple a matter as one might think at first; while the differential diagnosis is the essential condition in successful treatment.

Given a case of eruption of the face in the region where the beard grows in men, for eczema barbæ can only be predicated of men, we have a group of lesions so nearly alike that no eye can detect the difference, and no analytical reasoning can lead us to the correct result, unaccompanied by the closest inspection with instruments of precision.

To begin with we have several theories, each of which may be wrought out to its conclusion, in order that by exclusion we can arrive at the exact case in hand.

For example, a patient presented himself at the clinic, some two weeks since, with an eruption upon both sides of the face, covering the entire bearded region. This skin lesion had persisted for twelve years without alleviation. The patient has consulted many physicians, taken continuously drugs, especially iodide of potassium, as some say, "to drive it out of the system," and a strange fallacy in the reasoning is that the greater the eruption and the greater the tendency to formation of pus, the more it is taken as a favorable symptom, that the medicine is actually driving the disease out of the system. I said to the students this case presents to us many difficulties in diagnosis. Is the present condition of the patient's face a modification of his disease through his extreme medication? But let that pass. We have several theories, each of which we must conscientiously try, and, if possible, see to which theory all the facts in this case apply, viz.:

Eczema barbæ.
Acne.
Sycosis (parasitic and non-parasitic).
Trycophytosis.
Syphilis.

First let us consider the objective symptoms. And here let me say that I have recently read an article in one of the medical journals, showing how easy is the differential diagnosis of this group of skin lesions, in which I think the author has made it appear entirely too simple a matter.

First consider sycosis. Sycosis is a perifolliculitis of the hair follicle, either idiopathic or parasitic.

Let us consider idiopathic sycosis. For some cause, to me not known, the follicles become inflamed around the hair, and giving this point in diagnosis, that each pustule will be pierced through the centre by the hair located in each particular follicle. So by inspection, if this condition is general, we may be able to predicate of this sycosis, but sycosis parasitic is caused by the growth of a vegetable within the hair follicle, and through the shaft of the hair.

*A paper read before the Wayne County Medical Society, Dec. 16, 1886.

causing identically the same physical condition as idiopathic sycosis. To differentiate these each from the other, we must resort to the microscope, and I must say to you now, that the clinic hour is not sufficient for a differential diagnosis of this case, but only affords an opportunity for pointing out the steps by which we must arrive at a wise and just conclusion.

Again, supposing it to be eczema barbæ. We must remember that eczema barbæ may be, and often is, a sequence of a prior sycosis, or acne, the long-continued irritation of the sycosis leaving as a result, a chronic and persistent eczema. You will now see the force of my statement of the necessity for a correct diagnosis, for if this is a case of sycosis parasitica, for example, you can readily see how absurd, not only, but hurtful in the extreme, will be all vigorous medication for that especial purpose. I would not have you forget, however, that you are physicians, and that the patient may need remedies for other reasons. He may be anæmic, rheumatic, cachectic, and you are not to forget in your treatment of this particular case, that it is the patient you are to serve, and not this local condition only. In so far therefore, as in your province as a physician, as you see that remedies are indicated for reasons outside of this condition of his face, you are to treat for the same; but I spoke emphatically of but one lesion, sycosis, for which no internal medication could possibly be indicated.

It is not so difficult to exclude tricophytosis on account of its peculiar conformation, while it has, as its cause, a vegetable parasite. At the same time you will please remember that these patches of tricophytosis may be coalesced and give the same appearance we have in this person's face. However, I will exclude tricophytosis on the theory of probabilities, there being but one case in hundreds to which that remark might apply, rendering, of course, the probability very remote.

The subjective symptoms in all these cases are similar: pain, itching, burning, to a degree which prevents sleep, and by loss of rest injures seriously the health of the patient. But nature is kind to us and after years of toleration a person sleeps, even while enduring great discomfort.

There are no pustules, neither vesicles on this patient's face, but a scaly patch, at present, without moisture.

Further, this will help us to exclude sycosis, for the present at least, by their absence. The same may be said of acne.

Now, as it seems to me by the first examination, we have arrived, by more or less rigorous analysis, at the exclusion of all but eczema barbæ. Now this eczema barbæ, chronic, will try our patience somewhat in treatment, but if, upon further examination and more critical study it becomes conclusive that eczema barbæ is the diagnosis, our way is clear, although much time may be required before this patient may make a good recovery. He is by profession a painter, for the most part working out of doors, a house-painter, and in how far his occupation may be causative of this disease I am unable to say. I do not know that lead would tend to cause it, but there are certain dyes and cheap coloring materials which most certainly will produce eczemas, for instance a red flannel shirt cannot be worn by some persons, so sensitive is the skin to aniline dies. This eczema is called eczema venenata.

We have prescribed for this patient an oxide of zinc ointment, with some camphor rubbed down in it, the camphor for its anti-pruritic qualities, and the oxide of zinc ointment for the purpose of supplying an artificial epidermis, and thereby relieving the rete mucosum from the irritating influence of the external air. This ointment to be used night and morning, but more especially on going to his work, the more especially at this season of the year, when the cold, raw winds are more irritating than in the soft summer days. And the patient will report from week to week for observation. Meanwhile I will critically examine him for sycosis by the aid of the microscope, and if it is found that our reasoning has led us wrong I shall hasten to correct my error of diagnosis.

The popular term for all these troubles indiscriminately is barber's itch, and like many popular terms, as "bilious," "salt rheum," etc., can have no possible meaning with the physician. The term itself, barber's itch is misleading and unjust, in that, by implication, it is supposed to come from the contagion of the barber's razor.

For the purpose of this paper I shall quote from GEORGE FOX who says: "In order to show the points in the diagnosis of eczema barbæ it it will be convenient to describe briefly the features of these other affections. Tricophytosis barbæ is a tolerably common affection, which begins usually with one or several circular patches, which are irritant, slightly scaly, and which tend to increase steadily in circumference. Sometimes the affected patch becomes swollen and the surface assumes a lumpy appearance. It rarely, if ever, affects the whole beard as does eczema, and is generally present in its characteristic circular form upon the face, neck, or other non-hairy parts. It is generally a dry ruption, and, unlike eczema, it does not usually present a moist or crusted surface. (Eczema barbæ presents a moist surface only at certain periods of its evolution.—YEMANS.) Again, sycosis is a term which is often applied to nearly every affection of the bearded portion of the face, while its use should be restricted to that inflammatory condition of the hair folli-

cles and adjacent cellular tissue, which is characterized by pustules perforated by hairs, which in time become so loosened that they can be extracted by the gentlest traction of the epilatory forceps. The affection involves the deeper tissues of the skin, and causes a painful swelling of the parts. It is often associated with eczema, and by some is regarded as nothing more nor less than a pustular form of the disease. Eczema of the beard is characterized by the symptoms of eczema in general, redness, burning or itching, with a tendency to the formation of crusts, and finally a thickening of the skin and desquamation. Some writers claim that the pustular eczema of the beard, which of all the forms of eczema bears the closest resemblance to sycosis, can be distinguished from the latter by its extending beyond the hairy parts upon the cheeks and neck, whereas sycosis is strictly limited to the hairy parts."

This point in diagnosis cannot, however, be relied upon implicitly. The epilation even in sycosis parasitica is not always painless, but, on the contrary, is often very painful, and requires great confidence on the part of the patient being treated, before he will allow an operation, which is at the same time very tedious and very painful.

Now as to the treatment of this whole group of cases: In my judgment, the first step in the process is epilation. But where the eczema is chronic, and neither pustular nor vesicular, we may be excused if we try for a time the milder method of local application. As to epilation in sycosis parasitica, it will be necessary to continue that process until every spore is destroyed, for so rapidly do these fungi multiply that one infected follicle may, in a short time, cover again the same area as before epilation. But slight application of ointments to the surface will be required, and then only for the purpose of modifying the pain.

The more common vegetable parasites are tinea, trichophytina, causing tricophytosis and producing upon the body tinea circinnata, on the head tinea tonsuranus, on the face parisitic sycosis, and on the thighs eczema marginatum.

The parisite causing tinea favosa is acorion schœleinii. Tinea versicolor, chromo phytosis; parasite is microsphoron furfur.

In conclusion, this fable teaches us the necessity for careful investigation before proceeding to treatment. I have seen many cases of sycosis, for example, which have lasted in this community for years, constantly under treatment, with ointments and medication, more especially iodide of potassium and arsenic, without relief and doing no credit, but great harm, to the practitioner, as they pass from under the care of one doctor to the care of another. And I have thought sometimes that it might be well for the profession to acknowledge dermatology as a legitimate and proper specialty, which affords scope for one man's life work, conscientiously bestowed within its apparently narrow limits.

CHICAGO MEDICAL SOCIETY.

OFFICIAL REPORT.

Stated Meeting, Nov. 15, 1886.

The President, DR. E. J. DŒRING, M. D., in the Chair.

DR. LESTER CURTIS read a paper on

THE ABSENCE OF THE PATELLA TENDON REFLEX.

in which he enumerated a number of cases of persons in apparently good health in whom the patella tendon reflex cannot be elicited, such being the case with the author himself. He quoted from authors who had made similar observations, and who had also found the patella tendon reflex present in diseases in which it is not expected. These variations in the presence and absence of the patella tendon reflex were so frequent that he was inclined to question its absence as an important sign of nervous disease. He believed it a sign that had received undue attention.

DR. D. R. BROWER, in opening the discussion, said: I have been very much interested in DR. CURTIS' paper. I have found the patella tendon reflex occasionally absent in health, but very rarely. Since the suggestion was made by JENDRASSIK that an effort be made to increase the general muscular tension by having the person pull upon the fingers of one hand linked into those of the other, which was brought to my attention about a year ago, I have been able to elicit the patella reflex in healthy persons when otherwise I would have failed. I think it is necessary in doubtful cases that the blow be struck upon the naked limb. I think it is occasionally absent in health, and it has been my habit in teaching to always say in regard to the patella tendon reflex that it is the loss and not the absence—we have first to know that the person had patella tendon reflex before we can regard its absence as pathological. I have taken that view of the matter for a long time. As to the presence of tendon reflex in locomotor ataxia, the president will remember one of the patients that I saw three or four years ago in whom all the other symptoms of locomotor ataxia were present in a marked degree, and I have met with that condition in one or two other cases. I think that in these cases the degeneration has not commenced in the usual place. At the meeting of the American Medical Association an interesting paper on this subject was read by DR. ZENNER, of Cincinnati, who has made very extensive observations upon healthy people as

well as upon the insane, with a view of determining the real value of this sign. And his opinion is in accord with my own, that if all precautions are taken it is a remarkable thing for it to be absent in a healthy person. In the case cited by the author there would seem to be a part of the spinal cord that was not entirely destroyed, possibly enough to admit of the passage of the stimulus from the sensory nerves.

Dr. H. N. Moyer said, regarding the manner of eliciting the patella tendon reflex: Unless very great care is exercised in determining that the reflex is absent, the observation has very little value. In testing this reflex I prefer to have the leg rest across the back of the wrist, by which means we easily detect any tension of the hamstring muscles, which greatly interferes with the reaction. As to the manner in which the tendon should be struck, I do not believe that the surface of the ulnar side of the hand is the proper thing to elicit it, and the ordinary rubber hammer is not quite heavy enough for that purpose. The best thing is a steel hammer with a small rubber tip. In doubtful cases care should be taken to percuss the tendon over its entire surface. I have seen a number of cases in which I supposed the patella tendon reflex was absent in undoubtedly healthy persons, but since this new manner of increasing muscular tonicity by lessening the inhibitory power of the brain over the lower spinal centres has been adopted, have never seen a case in which the patella reflex was absent in a healthy individual. There is one other point, in regard to the difference in the amount of reflex obtained when this procedure is employed and when it is not. There are certain qualitative variations which have not been pointed out. I have under my observation at present two cases of chorea in which there is only the slightest evidence of patella tendon reflex on percussion in the ordinary way, but when the patients are required to clasp the hands and the patella is then struck the reflex is markedly exaggerated. I think in some cases this procedure will enable us to diagnosticate between the neurasthenia of cerebral and of spinal origin. I have one undoubted case of locomotor ataxia in which the patella tendon reflex is present. In the two cases of Westphal which have been recently published, the microscope revealed the morbid processes in the lumbar portion of the cord to be largely confined to the points of entrance of the posterior roots, and also a slight extent involving the lateral columns. This probably obtains in the cases reported to-night.

Dr. J. J. M. Angear said: I do not know that we can come to the conclusion that our patient is suffering from locomotor ataxia when we find the patella tendon reflex absent. I have in mind a patient who was under my care about two years ago, in whom the patella tendon reflex was entirely absent. There was unsteadiness in gait, a little wavy motion when attempting to stand erect, with eyes closed and feet close together, and the patient walked with a cane. There were symptoms of congestion of the cord, a feeling of a heavy weight at the feet, that peculiar sensation known as girdle feeling, which improved on lying down. The patient improved somewhat under the use of mercury and iodide of potash (I learned afterwards that when a young man he had syphilis, but it has not shown itself since). This was two years ago, and the patient is no worse to-day, but it seems to me that he ought to be a great deal worse if it was locomotor ataxia. If we fail to elicit the reflex by simply striking the tendon, we can get it, if it is present, by engaging the patient in conversation about something foreign to himself and then suddenly strike the tendon. In regard to cases where it is absent in apparent health, I think we should emphasize *apparent*, for we have no positive evidence that the nervous system is in a normal condition in such cases, and I should be a little skeptical with regard to the patient's perfect health if I had taken all the precautions for securing this action and then found it absent.

Dr. Robert Tilley said: I wish to bear testimony to the truth of Dr. Curtis's observations. I certainly have seen a small number of persons that I considered average healthy individuals in whom I have not been able to elicit the patella tendon reflex. I have not caused the patients to bare the leg, but I have employed other devices to satisfy myself that if the tendon reflex was not absolutely absent it was centainly diminished in its activity. I would like to emphasize the fact that it seems under certain circumstances to be obtained when struck upon one side or the other when it cannot be obtained by striking the tendon in the centre. On several occasions it has struck me as desirable in post mortem examinations to have a microscopic examination of the tendon itself, and see if some peculiar changes might not be visible in it. I would ask Dr. Curtis if he knows of any histological investigations in that direction. I recently saw an article giving an account of a case where tendon reflex seemed to be absent, but on the administration of a small dose of morphia it was elicited. No mention has been made of what may be called a normal tendon reflex, although the exaggerated form has been referred to, and I do not know whether anyone here would venture to give a definition of a normal tendon reflex in opposition to an exaggerated one. I am certainly disposed to take exception to Dr. Curtis's explanation of the the tendon reflex that it is most likely to be found in individuals who are a

little scary, are easily frightened, easily thrown off their guard, or persons of that character. I may instance myself. I do not think I should be easily thrown off my guard, but in my case the tendon reflex is markedly present, so much so that those who would distinguish between the forms would say that mine was an exaggerated form.

DR. J. FRANK said: I have a theory as to why the tendon reflex might be absent in a healthy person. In order to get the reflex the tendon must be put on the stretch, and there are such things as abnormal patella tendons. If the ligamentum patellæ is abnormally long when the leg is flexed the tendon is not put on the stretch; if lax and cannot be made tense, it might be struck all day without any result. I think this will explain why in some people the tendon reflex is absent. When I was a student my preceptor tried it on me but could not get any tendon reflex; it seems that at certain times my tendon answers to the blow and at other times it does not; still I have been in good health all my life. Where the tendon reflex is absent without other symptoms the tendon should be examined.

DR. JAMES JEWELL said that in tendon reflex, when the muscle is struck a shock is given to the sense nerves. He had met with a large number of cases in which the patella tendon reflex could not be obtained by the ordinary impulse, but which he had been able to elicit by other means. He thought locomotor ataxia did not depend so much upon loss of sensibility in the muscles themself as in the great numbness of the feet. He had had cases of locomotor ataxia in which the only symptom was acute sensibility to temperature, and another who had no sensibility on the right side except in the nates.

DR. JOSEPH ZEISLER read a paper on

THE USE OF ICHTHYOL IN THE TREATMENT OF SKIN DISEASES.

DR. ZEISLER gave his clinical experience with ichthyol in the treatment of over one hundred cases of skin disease. The strength of the the salves varied from 3 to 30 per cent.; frequently other drugs were added as adjuvants according to the requirements of the case. All the usual ointment bases mix well with it. Ichthyol soap was found very useful for acne rosacea and sycosis. The physiological effects of ichthyol; its regenerative power, when used in a mild form, its resolvent action when used in full strength; its contracting influence upon blood-vessels, were explained from its chief quality, to draw oxygen from the tissues. In about twenty-five cases it was used internally in the form of capsules (0.10 pro dosi), three to ten of which may be taken daily. In this form DR. ZEISLER found it very useful in chronic cases, and thinks that it may frequently be preferable to arsenic. Very good results were obtained in eczema, fifty-six cases of which, comprising nearly all forms and stages of that disease, were treated with it; its effect and the mode of its application in the principal form is described and illustrated in the history of two cases.

In sycosis (eleven cases) and psoriasis (two cases), it was found to be a very good adjuvant. Excellent results were also obtained from internal and external use of ichthyol in acne rosacea (seventeen cases). In acne vulgaris (ten cases) it did not result beneficially except when used internally. In several other cases, herpes tonsurans, prurigo and acne varioliformis, it was used in too few cases to allow of any decided conclusion.

DR. G. C. PAOLI said there is no one remedy that we can positively rely on in the treatment of skin diseases. This new remedy, ichthyol, was used by DR. UNNA. of Hamburg, but he combined it with other ointments. We cannot treat all the stages of skin diseases with the same remedy. Ichthyol has a fetid odor, and he should think it would be obnoxious in use. He has not had an opportunity to try it.

DR. E. J. KUH said: Not enough time has elapsed to express either a final condemnatory or laudatory opinion on ichthol. The physiological experiments by BAUMANN and SCHOTTEN are entirely insufficient, and the conclusions reached are practically no conclusions at all. Our clinical knowledge has been sufficient to show its value in skin diseases. And as DR. ZEISLER has confined himself to a discussion of its use in his specialty, a few words bearing on the application of ichthyol in other diseases may not be out of place. LORENZ and UNNA are its chief recommenders. The former in the beginning applied it in acute and chronic articular rheumatism, and to judge from the experiences of others (including myself) who have used it in this direction, there can be no doubt that it is a very strong adjuvant in this disease, and that the exhibition of salicylates is promoted in its efficacy when used in conjunction with ichthyol salve. LORENZ extended its use to gout, muscular rheumatism, contusions, gastric troubles, etc. UNNA, whose enthusiasm is not so unbounded as to inspire distrust, barely finds a limit to its usefulness. It is a mild anti-tuberculosum, has cured asthma in an eczema patient, will cause immediate demarcation in erysipelas, etc. It is a malicious characteristic of new remedies that they are wonderfully multiple in their therapeutic action. Time, the great enemy of the Pharmacopœia, is their surest test. Let us hope that it may deal gently with ichthyol.

DR. JEWELL thought a great deal of attention should be paid to the constitutional con-

ditions, and especially to the neurotic aspect of cases of eczema. He had met with success in the treatment of skin diseases by a current of large quantity and mild intensity from an electric battery.

DR. JOHN A. ROBISON said that the literature on the subject of ichthyol is very meagre except what is found in foreign and special journals. He was sorry that DR. ZEISLER did not give a fuller description of the drug, in order that general practitioners might become more familiar with it. Undoubtedly many of the members present thought it a proprietary preparation, and therefore will not investigate its merits more closely. During the past year a large number of new remedies have been introduced which unfortunately bear a foreign patent, although the manner of manufacture is known. While opposed to prescribing secret proprietary preparations, he believed the therapeutical action of such drugs as ichthyol, antipyrin, thallin, etc., should be studied.

DR. R. TILLEY said that it was to be regretted that the author did not present some cases that where treated solely by ichthyol; for instance, the case that went to so many physicians, the salicylate given would be likely to exert quite as much influence as the ichthyol, and the same might be said of the case treated by hydrarg. ammoniatum. It is really difficult to form an estimate as to what we can expect from ichthyol by the result of the combinations which the author found it necessary to use.

DR. JOSEPH ZEISLER, in closing the discussion, said that he did not think of recommending ichthyol as a panacea; on the contrary, he was afraid that it would be overestimated, and that some would use it in cases where it might not be beneficial. As to the remarks of DR. KUH, the physiological effect of ichthyol was not tested by experiments on animals, but was inferred from clinical observations. He was very much interested in DR. JEWELL'S suggestion, and referred to the well-known forms of neurotic eczema. Ichthyol has been found in Tyrol, Austria, in some bituminous rocks. He was unable to tell anything about its manufacture; Mr. Sargent gets it directly from Germany. In reply to DR. TILLEY, he said it was true that in some cases he could not say how much of the benefit was due to internal and how much to external treatment, how much to ichthol and how much to other remedies. But his observations on ichthyol might still have some value when compared with other cases where *ceteris paribus* it is not used.

A French joke: They were speaking of the resurrection of Lazarus. "In our age you don't see any such miracles." "No, indeed," remarked enthusiastic DR. X., "medical science has made too much progress."

[FROM NEW ENGLAND MEDICAL MONTHLY.]

EXAMINATION OF THF URINE.

BY J. MILNER FOTHERGILL, M. D.,* EDIN.; HON. M. D., RUSH, ILL.

When I was a medical student—a good many years ago—I was taught with scrupulous care how to examine the urine for albumen and sugar; but long years of practice have taught me that it is much easier to detect the presence of either of these substances, than to make out their significance when found.

The simplicity of test-tube examination possesses a certain fascination for some persons. Albumen is found, and of course Bright's disease is afoot. Sugar is found and behold the dreaded diabetes mellitus has laid its mortal grip upon the patient. This is all very well if it only happened to be true! There is where the hitch lies. For that class of mind which can only see the gravest aspect of any subject, this is all very well. Some people can never restrain themselves from exhibiting their cleverness in the shape of letting one see they know and realize the full significance of what they discover. How many medical men took to their beds to die when they found albumen in their urine, soon after Bright drew attention to albuminuria; but finding that the King of Terrors did not call for them, threw off their apprehensions, left their beds, and went back to their work? A great many more than care to say much about it. What DR. BRIGHT did teach was that "when dropsy was found with albumen in the urine, then disease of the kidneys was present." But very soon the dropsy factor got left out, and albuminuria alone involved Bright's disease. This shows, as FRANKLIN BLAKE said in "The Moonstone," viz.: "We English are the most slovenly thinkers in the world except when making machinery." But in this case the English do not stand alone in slovenly thinking. The medical world at large simply took leave of its senses. I do not for one moment wish to convey the impression that the reaction of the urine in a test tube is not to be noted; only it does not work well in practice to attach undue and disproportionate importance to one symptom, to the exclusive and comparative neglect of others. Yesterday a patient at the hospital with syphilitic cachexia brought some urine, as she had been directed to do by my clinical assistant. I told him it would probably be albuminous. He examined it, and found one-fourth albumen. Now what light does this clinical fact throw upon that particular case? I am bound to admit that I, at least, do not know. The darkness is unillumined by it; but my *belief* is that her cachetic state is largely

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due to the loss of albumen by the kidneys rather than there is any kidney disease present.

This is an aspect of albuminuria, in my opinion, too little considered. If there exist a constant drain, no matter whether of serum-albumen or peptones, the system will be imperfectly nourished. A case came under my notice two years ago in the form of a Cambridge undergraduate, who was pale and weak, and feeling unfit for his work. Albumen was present in the urine in unmistakable quantities. In that case two views could have been taken up, and maintained perfectly honestly. My opinion inclined to the case being one of malnutrition in which the loss of albumen played a part. At any rate the lad got well, and the albumin disappeared from the urine. But because such cases do crop up, the systematic examination of the urine need not be flung aside like an obsolete weapon.

Then again, persons who have had malarial fever are very apt to pass some albumen. One well-known surgeon left India and came home, believing that his health was broken and gravely impaired; but after ten years he is still hale and vigorous. We often talk the matter over, and regret that so much misapprehension exists on the subject. In any interference to the portal circulation, albumen is liable to show itself in the urine. When the interference is removed the albumen disappears.

Bearing in mind these facts, the obvious conclusion is this: It is not proper to assume that albuminuria indicates Bright's disease. A medical man has no moral right to alarm a person by announcing Bright's disease merely on the discovery of albumen in his urine. It is as unjustifiable as to inform a man his house is on fire merely because his chimney is ablaze. Before saying anything to the patient the urine should be carefully searched for tube-casts, and if they are discovered, then the announcement is justifiable, but not until!

Of course, no man but a fool or a crank would undervalue the significance of the evidence furnished by the test tube. Say it is a case of cardiac dropsy. The appearance of albumen in the urine while the case is under treatment is almost the herald of despair. But here the circumstances of its appearance are known; but if a patient comes under notice with cardiac dropsy, and the urine is found to be albuminous, its significance is by no means so ominous. Any cause of venous fulness in the kidney may give rise to albuminuria; but it is very important what the cause is, as that will determine the significance to be attached to the albuminuria.

An albuminous condition of the urine derives its import from its associations, and the men who disturb the peace of a family merely because the urine in a test tube gives evidence of albumen, are scarcely fit for their vocation, and certainly take a very oblique view of the moral obligations of a family physician.

Again, as to the presence of sugar in the urine. Many medical men have lost their heads in a manner nowise creditable to them on finding some sugar in the urine, whether their own or that of some one else. The discovery of sugar should at once put the medical man on the alert, just as does the discovery of albumen. In either case the medical man should at once be upon his guard; but this is a very different matter from abruptly delivering an adverse opinion. The latter is very much like condemning a suspected man without going through the preliminary of a trial to ascertain if he is guilty. The evidence against him at first sight may seem damning, but the process of trial may demonstrate his innocence and not his guilt. When albumen or sugar is detected in the urine of a patient, then a searching examination into the facts is incumbent upon the part of the physician.

As to sugar, corpulent persons often pass saccharine urine, and especially corpulent, gouty persons. What significance glycosuria possesses under the circumstance is unknown to me. One such case has been under observation for over eighteen months. There were other symptoms present telling that the case was something more than mere glycosuria. While allaying the lady's apprehensions as to any immediate danger, both she and I firmly believe she will die of diabetes. And why do we both believe this? Because from family circumstances she is subjected to worry and annoyance from which she cannot emancipate herself. But as to other cases they seem to go on for years without any deepening of the condition.

There are other circumstances, however, under which glycosuria is found which give it much significance. All physicians of any experience have met with cases where an acute condition of diabetes is started by a sudden shock or fright. Such associations are matter of notoriety. But the association of chronic diabetes mellitus with mental conditions is far less generally realized. Yet those who are giving special attention to the subject are beginning to be strongly of the opinion that diabetes is casually dependent very often upon "carking care," disturbing the liver as regards its glycogenic function. If this view can be substantiated, and I for one think it can, then the appearance of sugar in the urine, even in small quantity and fitful as to presence, is terribly suggestive. If such a case be watched, it will be found to deepen in gravity; for a while a strict diabetic dietary may afford relief, but it turns out to be a case of "the further in the deeper." Of course this is the more likely to

occur if the patient continue to carry his load of care. If, however, the load be lightened, the result may be otherwise. The glycosuric condition may remain static for years. With one such case I am intimately familiar.

Diabetes—not merely glycosuria, but something more—is a malady which does not necessarily progress with steady, relentless tread to the tomb. We must learn to regard it as a disease which may take its origin in small beginnings and deepen to death; or be arrested, as the case may be, and according to what measures are taken. If this view be well founded, the appearance of sugar in the urine is fraught with high significance. Nor is the difficulty to be met by gluten bread and almond biscuits. That is narrow, not the wide view of the subject.

When a hard-working business man is a patient, in my opinion, a regular periodic inspection of the urine should be made, and when traces of sugar even are detected, to keep a keen watch over the patient. If small quantities are pretty constantly present, then he should be told frankly and honestly his true position, and the facts looked in the face. Such a man will be liable to temporary aggravations of his condition on any passing extra mental perturbation. Such a case is well known to me, where a glycosuric man is a diabetic when anything gravely puts him about. In such cases the urine varies hand in hand with the general condition; and the urinometer will register the case pretty accurately.

Then there are cases of glycosuria where the amount of sugar is considerable in the urine passed three hours after a meal; while the urine passed in the morning contains but little sugar. Speaking broadly, such a condition carries with it a better prognosis than where the morning urine differs little from that passed at other times.

Sugar, like albumen, in the urine is a stiff hint to a medical man to put on his studying cap!

As to the presence of phosphates in the urine, they may merely be made visible because the urine is not acid enough to keep their solution. It gives a patient greater interest in himself and his maladies to tell him he has phosphates in his urine; especially if at the same time the impression is conveyed to his mind that phosphates do not belong to healthy urine. Even if they be present in considerable amount it is not easy to appraise their import, since Sir William Roberts, F. R. S., in his well-known treatise on "Urinary and Renal Diseases," says: "There is not the least reason to believe that there is any constitutional state specially characterized by an excessive excretion of phosphates."

If in what has been written here the reader detects a latent contempt for test-tube examination of the urine, he will kindly please to understand that the contempt is not felt for test-tube examination of the urine—certainly not—but for the way it is too often done! No medical man ought to give an opinion on one examination of the urine. Of course in consulting practice one has too often to remain contented (or may be discontented) with one examination; and as a consequence of this, the examination of the urine of one twenty-four hours falls into a subordinate place in the diagnosis. One has to teach oneself to observe the other features of each case. And there is one matter about the urine of the very highest importance and significance in my opinion, and that is, the patient's account of it! How much he passes; if he gets up at night to pass it; what it is like when it is passed; and what it is like when it has stood over night in a cool place.

When the urine of an animal possessed of a four-chambered heart and a fluid urine, deposits, on cooling, a quantity of urates—the form of urinary excretion belonging to animals with a three-chambered heart and a solid urine—depend upon it, the kidneys will suffer sooner or later for this reversion on the part of the liver. Human kidneys are not constructed to excrete the comparatively insoluble urates; and if they have to do so for a continuous time they become injured. If the urates are formed in large or considerable quantity, one of two things must occur, (1), the kidneys are injured by the out-put; or, (2), the urates are retained in the system as gout. The first gives Bright's disease; the second, gout in some form. Often the condition is a blend of the two.

If the bulk of urine be habitually small, obstruction to the blood flow in the pulmonic circulation (heart or lung) suggests itself.

When the flow is copious and the color pale, and the specific gravity low, Bright's disease with the large left ventricle, and the hard artery—with the resultant high arterial tension—is fairly certain.

This is rendered more probable if at the same time the patient gets up at night to empty the bladder. Why he does so is too long a story to be told here.

Examination of the urine as regards the patient's account of it, is grossly neglected; just as the reaction of one sample of urine in a test-tube is too highly estimated at the present time. And if the points put in this paper be conned over by the reader, and applied to his cases under care, I venture to think some mistake—potential or actual—may be avoided. A negative lesson it certainly conveys. Let not the reader abandon test-tube examination of urine; but let him make it more perfect and more extended as to time and duration of observation. What I denounce—and I do not denounce it more heartily than I detest it—is

the too common practice of giving grave opinions from a casual observation. And to point out the sources of fallacy, as has been done, is the only way to secure more careful examination. Certainly no patient should be told he is the victim of Bright's disease until a patient microscopic examination has been made. In the same fashion must the significance of sugar be determined—only here the microscope can lend no service, viz.: by common sense and special knowledge. Rash medical opinions rapped out on insufficient evidence may appear to establish the cleverness of the practitioner; but it is positively certain they have added a distinct amount to the sum total of avoidable human misery; and therefore constitute a practice to be heartily denounced and reprobated by every one who loves his fellow-men.

Correspondence.

PHYSICIANS' FEES.

The editorial in the last number of the AGE is valuable because of its direct statements, but it is peculiarly so because of its suggestiveness. No young practitioner fighting for a foothold in any community can read it without an interest intensified by his own environment. The young man who starts out in these latter days to win for himself a name, a living and a provision against the time when decrepit body and failing mind compel him to lag in the race, finds himself beset with difficulties which the "silver greys" knew little or nothing of when they started out.

Among these difficulties is the crowded state of the profession. The most reliable figures show that there is an average of one physician to five hundred inhabitants, and in some of the centres of population the field is still more crowded. It is safe to estimate that of these five hundred people twenty-five per cent. are paupers and dead beats, thus leaving four hundred out of whom the practitioner is expected to secure the living and surplus which it should be every man's ambition to provide. Now four hundred people represent, say, one hundred families, and experience shows that the average annual contribution of a family to the support of the physician is about ten dollars. Now when it is remembered that about twenty-five per cent. of the practitioners of a city have an income of five thousand dollars a year. that twenty-five per cent. more run about three thousand, and another twenty-five per cent., two thousand, the picking for the remaining twenty-five per cent., which is made up of graduates of from one to four years' standing, must necessarily be somewhat bare.

Another difficulty which did not exist, say twenty years ago, is the free medical institutions which are conducted with the triple object of charity(?), supplying clinical material for students, and advertising the officers connected with them. Sweet charity is one of the most God-like virtues, but it should begin at home, and when a member of any family or profession deliberately dispenses it to an undeserving object he not only does that object harm instead of good, but also those in whose welfare it is his first duty to be interested. The public are wont to admire the self-sacrificing spirit of the doctors who spend their energies in charitable work, so-called, but they take no heed of the hardship which this same charity(?) directly entails upon the young men who are willing to work and who have thoroughly equipped themselves for work. The established practitioner will make no charge rather than accept a material reduction from his fee, and thus establishes a reputation for being a "good man," a reputation which yields him returns in other directions. He thus deprives the struggling young doctor both of the little which he might collect from this class of patients and also of the experience which is essential to prepare him against the time when he too will be a "silver grey." This is all wrong, and it is no wonder that the young men of the profession are beginning to grumble. They would fain be ethical, according to the terms of the Code, but the law of self-preservation is supreme, and before it the cobwebs of sophistry are being swept away. It is well enough for those who are established in practice to preach the beauties of the Code, but those who are struggling to keep afloat will not long suffer the instrument to hang like a mill-stone on their necks. The restrictions of the Code may, fortunately, be broken through without any violation of those principles of honor and decency which are innate in human nature.

A third drawback to the young physician are the means which are employed to prevent the sickness which, under the present system, furnishes him with his income. Boards of Health, local and state, aim to prevent disease, and the aid of the profession is enlisted in the philanthropic work. This is all correct and proper, but it is rough on the doctors who are paid to cure sick people and not to keep them from getting sick. The health officer of a city, and the secretary of a state board of health are both paid comfortable salaries to superintend the agencies for the prevention of disease, and the medical profession are asked to give their services gratuitously to aid in this glorious work which, in proportion to its success, does away with the necessity of the medical profession, in so far at least as its healing function is concerned. Imagine a lawyer going about adjusting difficulties which, without his interference, would culminate in a law suit!

There is something radically wrong in our

way of doing things. If it is an implied duty of the profession to prevent sickness, this duty should imply a proper return from the public for this interest in their behalf. This being once conceded, it follows that the doctor should be employed by the year to look after the physicial well-being of his families, to regulate their hygienic conditions, to have an eye to what they eat and wherewithal they are clothed, to see that their habitations conform to what science has agreed is the right thing in the matter of drainage, ventilation, water-supply, etc. To do this would necessitate the contract system, which, however, the American Medical Association has by resolution condemned. The question which will shortly demand a solution is whether common sense and recognized business principles or the cast-iron dicta of the American Medical Association shall prevail. The highest function of the physician is to prevent rather than to cure disease, and it requires an equally high grade of intelligence and education with that demanded of the practitioner who regards it beneath his dignity to "go snooping around sewers and water-closets" to discover the probable cause of sickness.

I hope the AGE may see fit to continue its discussion of this matter with a view to getting the profession to give it serious consideration.

A. YOUNG, M. D.

PREMATURE RUPTURE OF MEMBRANES—ONE-AND-A-HALF POUND BABY.

August 10th I was called to see MRS. L. S., residing in the city. The husband said the "waters had broke the day before; his wife had no pain, and something must be done." It was impossible to tell from the history whether gestation was at full term, as patient had ceased to menstruate but three months before. On examination I found the os dilated to the size of a half dollar. I passed my finger through the cervix and felt the child's foot and toes, so the rent in the membranes was large. I assured them that if it was full term the child was exceedingly small. I visited patient next day. She was feeling quite well, and had no labor pains. I told them to advise me when contractions became severe.

Several weeks later I saw MR. S. He said, "folks are all right; wife enlarges for four to six days, then the water breaks and is discharged by the quart."

Sept. 13 labor came on suddenly. There was just time to call a neighboring lady when a daughter was born. It weighed one and a half pounds. There was but three slight labor pains. The placenta was about the size of an adult's hand. I saw the child Oct. 1st. It is perfect in every respect, nails fully developed. It did not nurse until the second week.

I obtained the following history: Mother's age, 28 years; always healthy; medium size; married ten years; one child nine years old; had four miscarriages. She says the waters broke every four to six days from the time I saw her, Aug. 10th, until the child was born, Sept. 13th.

The case is of interest on account of the length of time between rupture of membrane and delivery, and the weight of the child.

F. J. GRONER, M. D.

Big Rapids, Mich.

DR. WITHERS MOORE, the president of the British Medical Association, chose as the theme of his discourse at the last meeting: "The Higher Education of Women." In speaking of the improvement of the human race, the bettering of the breed of man, he has the following: "As MR. HERBERT SPENCER (Education, page 146) reminds us, 'the first requisite to success in life is to be a good animal; and to be a nation of good animals is the first condition to national prosperity.' We may add that, to be a race of good animals is the first essential of human well-being. Now, how striking is the contrast when, with the way in which, in the case of the human animal, conjugal and parental unions are left to the hap-hazard of individual fancies, we compare the persistent painstaking bestowed upon such unions by the breeders of the inferior animals. How suggestive is the very title-page of a book published in 1810, by one T. HORNBY MORLAND, running as follows:

"The genealogy of the English race horse;
with the
Natural History of his Progenitors,
from the earliest times
down to the period when foreign blood was first
introduced into this Kingdom;
Collected from the best authorities;
to which is added the
general practice of the most judicious breeders,
whereby they have
improved and perfected our breed of blood
horses so as to have acquired a
decided pre-eminence and superiority
in the essential points of
size, strength, beauty, speed, bottom, etc., etc.,
over those of other countries;
with observations
upon the present improved method of
breeding for the Turf—
on the selection of Stallions,
choice of brood mares,
crossing the blood, or mixing races,
etc., etc."

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Notes.

A patient who had been an inmate of the New York Hospital for thirty years, has finally succumbed. Her case puzzled the succession of medical staffs during these years. Several times she had been prepared for burial, but "came to" in time to prevent subsequent procedure. On one occasion she was kept for two weeks, previous counterfeits of death having determined the attendants not to declare her dead until evidence of decompositson should appear. She was bed-ridden, and at last died of gangrene. The autopsy revealed an encysted cambric needle imbedded in the left ventricle. No history of the entrance of the needle had ever been given, and its presence was, of course, never suspected.

Our correspondent, A. YOUNG, M. D., calls attention in our present issue to certain phases of the fee question which merit consideration. We have previously referred to the inconsistency and injustice of the medical profession in gratuitously serving the public in the direction of preventing sickness, the very thing without which, as physicians are now paid, their occupation would be gone. Were the contract system to be regarded as ethical, this injustice and this inconsistency might be removed.

The Journal of the American Medical Association declares that "an effort is to be made to abolish the health board of Detroit, Michigan, and create a Health commissionership endowed with full power." This is another illustration of the trite saying that one must go away from home to learn the news. The wish of the Journal's informant is father of the thought, in the present instance.

The following fruitful topics are suggested for the consideration of hygienists: "The Injurious Effect of the Suspender;" Paralysis caused by Pointed-toed Shoes;" The Cotton-backed Waistcoat as a cause of Pneumonia;" and "Half-hose as Related to Cramps in the Calves."

A German joke: The patient is a young lady, and the doctor is a more than usually nice young man. "I think I will have you completely cured in a few days." "Oh, doctor," sighed she, her eyes expressing more than her tongue, "there is no hurry."

An artist is painting a portrait of PASTEUR from a photograph, and desiring further information touching the subject, he received in reply to his letter of inquiry the following explicit particulars: "Face, palish-yellow; eyes, dark-gray; grayish beard; hair, scarcely gray."

"Pa, here's a piece in the paper about parasites. What is parasites, pa?" "Parisites, my boy; why Parisites are the people who live in Paris. Think you ought to know that, and you in the Third Reader."

Medical Progress.

ON THE THERAPEUTIC USES OF THE HOT BATH.—The application of heat in various ways to the surface of the body has long been recognized as a remedial agent of no small power, and the hot-air and vapor baths are often resorted to, either by the advice of the medical man or empirically, from a knowledge of the good results previously obtained from them. By those who have written on the subject, the effects of these baths are ascribed almost entirely to their action on the skin; and if any more remote influence is attributed to them, it is mainly through the skin as an organ of elimination that this influence is believed to be brought about. The hot-water bath, on the other hand, is usually regarded with dread, and persons who are advised to take a warm bath are commonly enjoined with the greatest earnestness not to allow the attendant to have the water in the bath at a higher temperature than 98° or 100° F. It is no doubt a wise precaution to warn those who are the subjects of serious cardiac disease or of any profound circulatory derangement to guard against too hot a bath or too long a continuance in a bath of any kind whatever; and we caution persons with equal earnestness against anything that may put a great or sudden strain upon the heart or arterial system. In such cases we prohibit foot-ball, and running to catch a train, an omnibus, or a tramcar; but it does not follow that people whose vascular systems are ordinarily sound may not indulge in these pleasures, if pleasures they are, to their heart's content; while to a great many of those whose muscles become weak and flabby from want of use, a good deal more running and jumping than they usually get would be beneficial in the highest degree. In the same way, it has appeared to me that persons suffering from various disorders, always excepting those above mentioned, may take the hot bath without danger, and in many cases with great advantage to themselves. By the hot bath I mean, in the case of the wet bath, one at a temperature ranging from 100° to 110° Fahrenheit. In the dry-air bath a temperature much higher than this can of course be borne.

Some time ago an opportunity was afforded me of making some observations on the effect of the hot bath in removing some morbid condition of the system. A man of middle life, in temperament nervous-sanguine, spare, and somewhat below the average height and weight, complained of languor, debility, want of energy, and lowness of spirits. On examination it was found that his heart and arteries were sound, though his circulation was rather weak. His alimentary system was fairly good, though the quantity of food taken was below the average. His skin was somewhat dry, and a few spots of psoriasis were found on the extensor aspects of the legs, arms, and trunk. His urine was cloudy with phosphates, and below the average in quantity. As the Turkish bath was not in this case available, he was advised to take a water bath at a temperature of 105° F., and directions were given him how to proceed in case of faintness. The day after taking the bath his condition was wonderfully improved. His circulation was stronger, his urine was clear, and he now felt cheerful and well. This improved state of matters continued for about twelve days, when all the unpleasant symptoms reappeared, and he began to feel as ill and dejected as ever. The most natural proceeding was, of course, to order another bath, and this he took with the same happy result as before. Since that time he has had a hot bath about once a fortnight, and by this means has managed to keep himself in very tolerable health and spirits.

It would be interesting to know the exact means by which the hot bath produces this powerful and beneficial effect on the system. It must, in the first place, be carefully borne in mind that the warm bath at a temperature below 100° F. has no influence that can be compared with the results to be obtained from the hot bath. The hot bath stimulates the whole system, and the effect of this stimulation appears to last for some time, for the patient above referred to remained well for about a fortnight after taking the bath. Having ascertained that his diet was as nearly uniform as possible, the quantity of urea excreted on three successive days immediately before and after the bath was estimated by RUSSELL and WEST'S method, with the following results:

Average quantity of urine in twenty-four hours for three days *before* the bath.....	916.67 cc.
Average weight of urea in twenty-four hours for three days *before* the bath.....	22.8 grms.
Average quantity of urine in twenty-four hours for three days *after* the bath.....	1040 cc.
Average weight of urea in twenty-four hours for three days *after* the bath.....	26.25 grms.

From this it appears that the quantity of urine and the weight of urea excreted were below what are usually stated to be the averages for a healthy man, but that both were very perceptibly increased by the hot bath. If we may assume that the other secretions and excretions were proportionately increased, then we have clear evidence as to the proximate cause of the improvement brought about in the general condition of the body. Perhaps we may compare the action of the hot bath with the action of any other irritant of moderate severity. The theory of counter-irritation is confessedly somewhat hazy and inadequate; but it is a matter of every-day observation that a moderate stimulation of the skin relieves congestion of internal organs immediately subjacent to the area of stimulation. In many cases there is only a remote connection between the vascular supply of the viscera so acted upon and the portion of the skin stimulated. It must be by a reflex action of the nervous system that a poultice over the loins can relieve congestion of the kidneys, or one on the skin of the chest can benefit a similar condition in the lungs. It is not unreasonable to suppose that there is some sort of connection between the centres presiding over the vascular supply of any portion of the body surface and those regulating similarly the quantity of blood proceeding to the organs lying immediately beneath. Thus a stimulus applied to any portion of the skin would lead to an increased activity of the nerve centre presiding over this area of the body surfance, and so relieve any existing congestion of the connected or contiguous centre governing the vascular supply of the viscera lying in the neighborhood of the stimulated surface. I think it was DR. BERRY HART, of Edinburgh, who first suggested this explanation of the action of counter-irritants. In this way, then, the hot bath would relieve congestion of many centres, and by restoring them to a healthy action would promote the circulation of healthy blood not only through the thoracic and abdominal organs, but also through the higher nerve centres, thereby leading to the dispersion of those morbid feelings conjured up by the faulty nutrition of the cerebral convolutions. Whether this be really the mechanism by which the good effects described above are produced, or whether some other explanation can be given, it seems clear enough that the hot-water bath might be used, with proper precautions, in many cases difficult to treat in any other way, such as chronic gastric catarrh and the protean forms of dyspepsia. One of the most marked effects of the hot bath is seen in the increased force of the circulation, and following necessarily from this an increased degree of muscular energy, with a corresponding increase of activity in the mental functions. In short, the flagging energies are restored and a more healthy tone is given to the whole system.

As in most other remedies, so in the case of the hot bath, the time and manner of application are of some importance. Like all other baths, the hot bath should be taken before the principal meal of the day, and if this meal be taken early the good results will be more certain than if it be taken late. The duration of the bath should be about fifteen minutes, and the temperature should be about 105° F. If faintness should come on while in the bath, the whole head should be immersed in the hot water, and kept there for a few seconds, when the faintness will disappear. The usual directions given in public baths are to get out of the bath as soon as drowsiness or faintness begins, and to ring for the attendant; but anyone who attempts to do this will most certainly aggravate his danger. As pointed out some time ago by MR. BENHAM and subsequently by myself, the application of heat to the head is a potent

means of averting syncope. From time to time we hear of deaths in the warm bath; and I am convinced that many of these might have been prevented by the adoption of the simple method referred to, instead of the deadly and often impossible means commonly recommended.—W. J. NOTLEY, M. D., in *London Lancet*, Nov. 3, 1886.

THE ARTIFCIAL FEEDING OF INFANTS.—The letters which have lately appeared in our columns on the artificial feeding of infants show the great divergence of opinion which exists amongst practical and enlightened members of our profession on this most vital subject. The poor mother, unable to suckle her infant, has not alone to face the conflicting instructions of doctor and nurse—the first clinging tenaciously to his physiological doctrines in spite of the screams of the infant and its non-increase in weight, and the second maintaining the excellence of her patent foods and of her various "thickenings," regardless of the future rickets in store for the luckless child. But when doctors disagree, and especially doctors who speak with the authority of experience, the mother's bewilderment may well be great, and she is either tempted to fall back on the time-honored rule of thumb, or take refuge in the hypothesis of compromise that the proper course lies sometimes with one, sometimes with the other, and sometimes between the two. We shall not presume to adjudicate between the diverging views of our correspondents. With the limited knowledge at present available on the subject, they seem to us alike too sweeping and dogmatic for universal acceptance. Let us attempt the humbler task of indicating some simple, homely test which ought to be applied in any given case before we conclude that the method which has been adopted in that case is a satisfactory one.

The first test depends on the quiet and comfort of the child and the increase in body weight. This increase ought to be from three to four ounces weekly or more. The weight test is, however, not conclusive if taken alone. Many a hand-fed child when 12 months old is fat and plump, but is found to be rickety to an extreme degree; and it is well known to nurses that breast-fed healthy infants are often much less stout than those which are reared by hand. The advocate of any given method will not, therefore, settle the matter by simple weighings, although these count for a great deal.

The second test depends on the examination of the fæces. With regard to the frequency, there is a common belief that four to six is the proper number of daily evacuations for an infant during the early months of its existence. We hold this to be a mistake. Healthy breast-fed infants often pass not more than two stools a day after the first fortnight, and satisfactory hand-feeding ought to aim at a similar result. We hold that there is a presumption that an infant who passes regularly from four to six stools daily is passing a great deal of undigested food, and that so far the alimentation is imperfect. The wholesome fæces of a healthy breast-fed infant are of a bright gamboge-yellow, they are not unduly offensive, and they present very scanty traces of undigested casein. Now, in the majority of infants brought up on cow's milk, even diluted to the starvation point, the stools are distinctly offensive, and are largely made up of masses of white casein. When this occurs, to find fault with the liver and do nothing more than prescribe the inevitable grey powder appears to us the most absolute empiricisms, and the antiseptic cleansing of feeding bottles and the banishment of tubes, excellent as these measures undoubtedly are, will not solve the difficulty in question.

How can the casein be dealt with? There are several methods open to us. First, it may be predigested wholly or in part. The simplest and readiest way of accomplishing this has, in our experience, been brought about by the use of one of the preparations suggested by SIR WILLIAM ROBERTS, which, made with fresh milk, is practically a partly digested milk gruel. But it is doubtful whether this method, invaluable as we believe it to be in selected cases, ought to be tried as the first routine step in dealing with the difficulty in question.

SIR WILLIAM ROBERTS, in his lectures at the College of Physicians, referred to an observation of his own made whilst feeding a healthy kitten exclusively on predigested food. Without obvious or marked departure from health, the kitten, nevertheless, in respect to body weight, fell behind another kitten fed on milk. It was suggested that some atrophy of unemployed glands might be responsible indirectly for this failure in nutrition. Now, in our problem, if we can get the infantile alimentary tract to digest for itself the casein masses, more will be gained than if the casein be predigested.

A simple, time-honored method, which we think ought always to be tried, is the dilution of the milk in varying proportions with barley-water, which, perhaps in a mechanical way, facilitates the separation of the curd into more manageable masses. If this is found unsatisfactory, a very little malted food ought, we think, to be added to each bottle. That the whole character of the stools in respect to undigested casein may become altered after the adoption of this simple expedient we have satisfed ourselves again and again, as well as of the diminution in the actual number of the evacuations. But our physiological friends protest that this is using farinaceous food, that the infant's pancreas and salivary glands are rudimentary, and that its economy is unequal to the conversion of starch. To this objection there are several answers to be made. First, physiologically, it is by no means proved that the sole agents in the conversion of starch are the pancreas and the salivary glands, and experiments to prove the absolute incapacity of the infantile alimentary tract to convert a small amount of starch are not forthcoming. Again, in a good malted food a great part of the starch has been already converted and rendered soluble. But let it be granted that even after boiling there is a small amount of unaltered starch; if the net result is that the fæces of the child are more wholesome and less frequent, that it does not suffer from vomiting, acidity, and flatulence, and that it is gaining weight, what evidence is there that the small amount of starch has done harm?

The employment of the term "farinaceous" has, indeed, brought us more or less under bondage in our directions as to infant feeding. To repeated meals of arrowroot, corn flour, baked flour, and the like, even when made with

milk, the term is applicable, and we are second to none in our condemnation of such methods of feeding infants; but a broad distinction ought to be drawn between them and the use of a very small quantity of malted soluble food added to milk. If even the malted foods be used in large relative proportion in early infancy, to the exclusion or great diminution of the quantity of fresh milk, we believe that serious risk is incurred in the direction of scurvy; and this is the more insidious because, with regard to the two tests which we have mentioned, the body weight may certainly increase, and the stools may be less offensive and less frequent than under a milk regimen. The proper use of the malted foods is that they should be employed in small quantity—not in any sense as a substitute for fresh milk, but as an aid to the digestion of the casein.

We have said nothing about the humanized milk and the cream-and-whey methods. Useful as these plans have unquestionably proved hitherto, they have been methods for the rich and not for the poor, and their discussion may be for the present deferred.—*London Lancet*, Nov. 20, 1886.

On the Treatment of Varicose Veins by the Injection of Carbolic Acid.—In the last paragraph of one of the chapters of Mr. Watson Cheyne's book on "Antiseptic Surgery" some short but very valuable instructions are given regarding the treatment for the radical cure of varicose veins by the injection of pure carbolic acid. I have treated within the last two years and a half eight cases (some of considerable severity) by the method Mr. Cheyne describes, with the most desirable results and with no ill-effect whatever. Under the circumstances it may, perhaps, be worth while to draw renewed attention to the very simple and effective means referred to for the removal of this troublesome complaint.

The treatment consists in the injection of one minim of pure carbolic acid at different situations into the enlarged veins, having previously cut off the circulation from the limb by means of an elastic bandage placed above the highest point of puncture. For the latter purpose the tube of an Esmarch's apparatus is best, but a Martin's bandage or two or three yards of elastic webbing will do excellently. Before operating the patient should be directed to stand erect or to sit on the edge of his bed with his heels on the floor for about two minutes in order to allow the veins to become distended. The Esmarch tube should then be passed round the thigh one and a half times, sufficiently tight to stop the superficial venous circulation, and a little time (about a minute) given for the vessels to become well filled below it, the remainder of the tube being then applied so as to cut off all circulation from the limb. Injections of pure carbolic acid, one minim each, are then made into the veins at about one inch and a half apart—as many as may be required for each case. A little pledget of absorbent carbolized cotton-wool is placed over each puncture as the needle is withdrawn, and well soaked with collodion; this is allowed to remain until, in the course of time, it falls off, when healing will usually be found completed. The elastic bandage cutting off the blood-supply should not be removed in less than fifteen minutes after the last injection has been made, and great care should then be taken not to remove it suddenly. The circulation should only be permitted to return by very slow degrees. For at least a week after the operation the patient should not assume the erect position or put his foot to the ground for any purpose whatever. The pain is very slight; besides that of the pricks of the needle, a burning sensation is felt at the seat of each puncture, lasting for ten minutes or less; and even this is not severe. Certainly no anæsthetic is required. Care should be taken that the subcutaneous injection syringe and needle are "surgically clean," and to ensure this they should have been placed in a 1 in 20 carbolic lotion for about twelve hours previously to use. I have done as many as eighteen injections in one case; and it seems to me advisable to begin with the injection next to the elastic bandage —that is, the one highest on the limb. Getting the point of the needle well into the vein is not quite so easy a matter as might at first appear; attempts to do so at right angles to it frequently fail, and the injection is thus made into the surrounding tissue. The best plan is to fix the skin over the vessel by means of the left thumb, close below the point selected for puncture, and to direct the needle through the skin and coats of the vein in the long axis of the latter. I should think that, in my cases, somewhere about 10 per cent. of the punctures caused suppuration, a little abscess about the size of a pea forming where this occurred; but this process, as the result of the caustic action of carbolic acid, was curiously slow and almost absolutely painless. Three of my cases were done to remove the cause of varicose ulcers of the leg, which had been healed over and over again by rest in bed and different means of local treatment, but which had broken out afresh on the patient's commencing to get about again. One of these, I know, was permanently cured by the operation, and so were the others, I believe. It sometimes happens that suppuration takes place at the seat of a puncture two or three weeks after the patient has been discharged from hospital, and some of the resulting indurations may continue tender on pressure for many months, but these trifling drawbacks of the operation are amply compensated for by the simplicity and safety of its performance, and the excellence of the results obtained from it.—W. F. Stevenson, in the *Lancet*.

Solanine—A Substitute for Morphine.—The many disadvantages of opium and its alkaloids are too well known to require mention, and while they are not sufficient to counterbalance the good effects of these drugs, they are of enough importance to make equally efficacious and more innocuous substitute a desideratum. According to Dr. Geneuil (Bulletin Général de Thérapeutique, September 30, 1886), we have such a substitute in solanine, which is not a newly discovered remedy, but rather one which has fallen, the author thinks, into unmerited disuse.

Solanine was discovered by Defosses in 1821, in the berries of the nightshade (*Solanum nigrum*), and has since been found by others in the stems, leaves, and berries of the bittersweet (*S. dulcamara*), and other varieties of

solanaceæ. It is now prepared from potatoes, by boiling the young shoots in water slightly acidulated with sulphuric acid, and adding ammonia to the warm decoction. It can also be obtained from the parings of very young or very old potatoes. The alkaloid crystallizes in fine silky needles, insoluble in water, and but slightly soluble in ether, oils, and cold alcohol, but dissolving more readily in hot alcohol. It has an acrid taste, and imparts a burning sensation when placed in contact with the mucous membrane of the mouth.

This substance was first employed in medicine by JULIUS CLARUS, of Leipzig, who published a memoir on the subject in 1859. The remedy, however, was never used by others to any extent, possibly because given in insufficient doses. CLARUS gave it in doses of from one-tenth to three-fourths of a grain, whereas GENEUIL states that it has no appreciable effect unless given in doses of from one to five grains per diem. It may be administered in pill, or the hydrochlorate, which is very soluble in distilled water, may be employed subcutaneously in single doses of about one-half grain, repeated three or four times a day.

The author has tried solanine in a number of cases of neuralgia, rheumatism, obstinate vomiting, spasmodic nervous affections, asthma, and bronchitis, and from the results obtained is led to believe that the remedy will prove to be of the greatest value in the treatment of these and similar affections. The following are the conclusions of his paper: 1. Solanine is a poison to the terminal motor plates. It narcotizes the medulla and spinal cord, causing a paralysis of the terminal, sensory, and motor nerves. By reason of this action solanine is to be classed among the best of the analgesics. 2. The drug may be prescribed in large doses without danger, and presents none of the inconveniences of morphine or atropine. There is no danger of a cumulative action. 3. Solanine does not cause congestion of the brain, even in the aged, and, probably, a like freedom from this danger exists in the case of children. 4. In all cases where it is necessary to calm excitement, relieve pain, or overcome spasm, solanine promises excellent results. It may be given with advantage in the place of morphine for the relief of any of these conditions.

If the author's exalted opinion of this remedy is borne out by further experience, it will indeed prove to be one of the most valuable of recent additions to the materia medica. But medicine is an uncertain science, and others may not meet with such wonderful success as DR. GENEUIL himself has had.—*Ibid.*

DYED HOSIERY AND ITS RELATION TO SKIN IRRITATION.—The April number of the Journal of the Society of Chemical Industry contains an elaborate paper on the above topic, by MR. JOHN R. ASHWELL, who is thoroughly familiar with hosiery dyeing as carried on at Nottingham and Leicester, the principal points for this work. The term "dyed hosiery" is limited to those articles which are dyed after their manufacture, not in the yarn. The main bulk of this consists of either wool or cotton, or mixtures of wool or cotton, known as "merino" or "shoddy," according to quality. With but few exceptions, cotton hosiery is subjected to a mordanting process which consists in impregnating, first, with tannin, and afterwards an excess of some metalic salt, by which means an insoluble tannate is formed. The article is then subjected to a severe friction and rinsing, which removes soluble and loosely-adherent particles. Mineral pigments, manganic oxide, lead chromate, Prussian blue or copper arsenite are not used. Ferric hydrate is almost the only precipitated mineral substance employed. All colors which are easily dislodged by soap are avoided. The tannates precipitated on the goods are highly insoluble, because they have to be subjected to friction and frequent rinsing. The tin and iron tannates, separate or mixed, form the mordants for almost all colors; the two tannates being used on bright colors. This has been done for a long while. Tin tannate is decomposed by alkaline preparations, but no tin passes into solution. Iron tannate is very largely used for the production of blacks with logwood, and has been so used for many years; and when we remember the quantities of iron taken into the system in food, it is difficult to see how the insoluble salts can act as irritants.

The coal-tar colors may be divided, for the purpose of this question, into two classes, according as arsenic is or is not employed in the the process of making the color. Under the first head may be included magenta, grenadine, aniline-brown and maroon. Popularly, it is supposed that arsenic exists in the hosiery dyed with magenta, but, so far as cotton hosiery is concerned, this is not true, while with woolen hosiery it is so little used that it may be ignored. In 1872, DR. SPRINGMUHL found in 14 analyses of magenta, arsenic from 6.5 per cent. to 0.25 per cent., but of late years the latter figure has not been reached, and the quantity is generally under .09 per cent. Cotton hose, mordanted with tin tannate, rinsed, dried, soaped, and redried, does not show on analysis any indication of arsenic.

Of the blues, violets and greens which are in use, some are met with as double salts of the color base and zinc. Experiments show that the zinc does not remain on the cotton.

The German government, after a searching investigation, permitted the use of all the aniline dyes, except picric acid, for dyeing and coloring even articles of food. Manufacturers of aniline dyes agree that they do not know of any skin-irritating properties of the anilines from workmen whose hands and faces are continually covered with them. In these cases anilines in a soluble form are presented to the body, but in hosiery the colors are in as insoluble a form as the dyer can make them.—*Polyclinic.*

PROF. DA COSTA ON THE MANAGEMENT OF HYSTERIA.—During a paroxysm, see that there is nothing to interfere with the circulation, and administer one of the time-honored remedies, valerian, assafœtida or the compound spirits of ether, or some combination of these drugs.

If this should prove ineffectual, the pouring of cold water over the head and chest will often prove successful. As to general treatment, first use all tact and firmness, and inspire patient with the belief that she has no real disease and can be cured. But do not be too sympathizing

or pay her too much attention, or prescribe too much or too often, for in many cases a little neglect is sometimes the very best prescription that can be given. Much advantage can be gained by getting her away from her present surroundings, and if it can be done, will prove to be a great element in bringing about the desired result. Give proper nourishing food, to make good blood, and iron, if patient be anæmic; but this cannot be laid down as a rule, for you must choose your patients.

A long-continued course of arsenic, or two or three grains of the oxide of zinc, three times daily, is always of some value. It is not well to put patient on bromides or opiates, because of the danger of her contracting the habit. The same can be said of cannabis indica and chloral. Patients are apt to be cunning and conceal bottles and prescriptions and have them frequently renewed, without the knowledge of either the physician or the patient's friends. So if you should be compelled to resort to the above-mentioned remedies, take them away as soon as possible, taking care to destroy all bottles and prescriptions. Allow no wines or stimulants. In that form where there exists abdominal tympany, besides the general management, order rectal injections of assafœtida, and warm sitz-baths, which the patient never likes; but this, in itself, seems to predispose toward a cure, for these are means of much value.

In hysterical paralyses, use all ordinary treatment, and of special avail is the electric current. The patient never likes this mode of treatment, will rebel against it and begin to walk. You obtain a cure in their predisposition to rid themselves of the remedy.

Hysterical anæsthesia can be treated in the same manner, using the electric brush, which will cause considerable pain and patient will object. Metallo-therapy cures remarkably in some cases, some special metal having to be ascertained by trial.

In the incessant vomiting which is sometimes met with, it is probable some food is taken slyly. Treat as other forms of hysteria, and firmly insist on the taking of food, milk in small quantities and often repeated. If you consider there is danger from the non-absorbing of sufficient food, rectal alimentation can be resorted to. Above all, firmness and decision on the part of the physician must be manifested.

If vomiting persists, try carbolic acid, in $\frac{1}{4}$ to $\frac{1}{8}$ grain doses, in mint water, every two hours. This will usually be effectual. Drop-doses of tincture of nux vomica every half hour, will often prove to be of much value.—*Coll. and Clin. Record.*

Emetics and Blisters.—In an instructive article, entitled "Notes on Some Forgotten or Much-neglected Remedies," by Dr. Caleb Green (Philadelphia Medical Times), a plea is made for the more extensive use of bleeding, of tartarized antimony and other emetics, and of blisters. It is quite the fashion nowadays to make a plea for old-fashioned remedies, and perhaps some physicians take a little pride in recommending what is "Early English" or "Louis Quatorze" in therapeutics, but we are quite of the opinion that what the common practice and presumably the common-sense of the medical profession indorsed for a long period of time must have some value, and it is not wise to let the effective measures of the past be forgotten.

Dr. Green believes in treating croupous pneumonia, when sthenic, by the jugulating plan—*i. e.*, by bleeding, and the subsequent use of tartarized antimony or veratrum viride. For tartarized antimony he puts in a special plea. As a cardiac sedative, he ranks veratrum higher, but he adds: "It seems not to be very generally known that tartar emetic is one of our most efficient agents in promoting parturition. When the pulse is tense, the os rigid, the skin dry and hot, the advance of the head slow, I have seen, by the use of small doses of antimony the most prompt and happy change for the better."

Dr. Green then alludes to the very general abandonment of emetics at the present time, except as simple evacuants of the stomach and air-passages. "Emetics," he says, "for the purpose of evacuating the bile-ducts and stimulating a torpid liver to a more healthy performance of its functions, and at the same time exerting an 'alterative' effect on the glands of the stomach and intestines, are not so often resorted to as formerly. They often relieve in a most evident manner that condition which, for want of a better name (and we scarcely need a better one), we call 'biliousness.' But the physician who will, even 'semi-occasionally,' resort to emetics, with all proper precautions, is in danger of being branded a 'fogy.' Yet, with the proper restrictions and precautions, we know that they are powerful for good."

Turning to the subject of blisters, he says that here again the modern physician is too timid in his practice, and often resorts to mustard and poultices when a blister would be better. The blister "is a powerful adjuvant to other antiphlogistic measures, even when resorted to early, in many cases of pneumonic inflammation, and, as I intimated before, where pleuritis is an early and marked complication."

In pleurisy he is particularly positive that early blistering is one of the most potent measures for lessening the inflammation. The blister will even prolong the lives of phthisical patients, by reducing the complicating pleuritic troubles.—*Med. Record.*

Ergot in Headaches of Children.—Dr. Sturgis, in the Boston Medical and Surgical Journal, recommends fluid extract of ergot as a remedy in the headaches of children. He says he has used the remedy with very good results. He gives 10 minims of the fluid extract three times a day after meals, and continues the remedy as long as the headache persists. If the patient is anæmic, iron may be used at the same time.

Iodol In Ear Diseases.—Dr. Stretter, who has used iodol, the new inodorous substitute for iodoform, in a large number of cases of ear disease, finds that in acute purulent inflammatory affections iodol applications rapidly produce marked benefit, but that in chronic inflammations of the middle ear it is generally quite useless, or at best no better than other more common methods of treatment.